

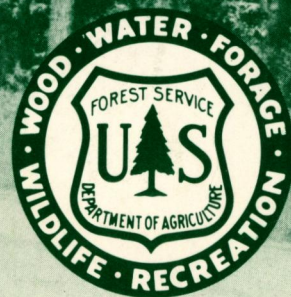
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# MISSISSIPPI FORESTS

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## *Acknowledgement*

The Forest Survey of Mississippi is a part of the national inventory being conducted by the U. S. Forest Service. The Southern Forest Experiment Station at New Orleans is responsible for the Survey in Mississippi, Alabama, Arkansas, Louisiana, Oklahoma, Tennessee, and Texas. Philip R. Wheeler, chief of the Division of Forest Economics, is in charge.

The sustained effort of many cooperators made it possible to complete the field inventory much sooner than it could have been done with regularly allotted Federal funds. Cooperation in the form of manpower, equipment use, aerial photography, or cash was received from the following:

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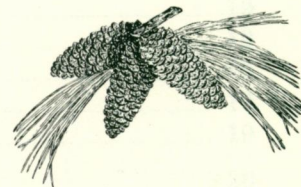
Liaison between cooperators and the Southern Station was provided by the Mississippi Forest Survey Committee, of which JAMES W. CRAIG is general chairman and JOSEPH E. WEATHERLY is secretary-treasurer. Committee members are: R. C. ALLEN, WIRT L. BOND, J. E. BRYAN, JR., W. W. DANNENBERG, D. L. FAIR, JR., ALBERT FANT, E. R. GREEN, W. E. HOUSER, BIRNEY IMES, JR., HOWARD L. JONES, R. E. JONES, D. V. LOGAN, W. E. MARTIN, FRANK McALPIN, M. C. MILLER, L. H. MOLLOY, HAL MOORE, A. W. NELSON, JR., J. S. OLDEN, R. T. PERRY, W. D. PHILLIPS, JOHN PUTNAM, MARION STEPHENS, LAWRENCE TAYLOR, JOHN W. THOMPSON, and BOB TYSON.

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**SOUTHERN FOREST EXPERIMENT STATION**  
**New Orleans, Louisiana**  
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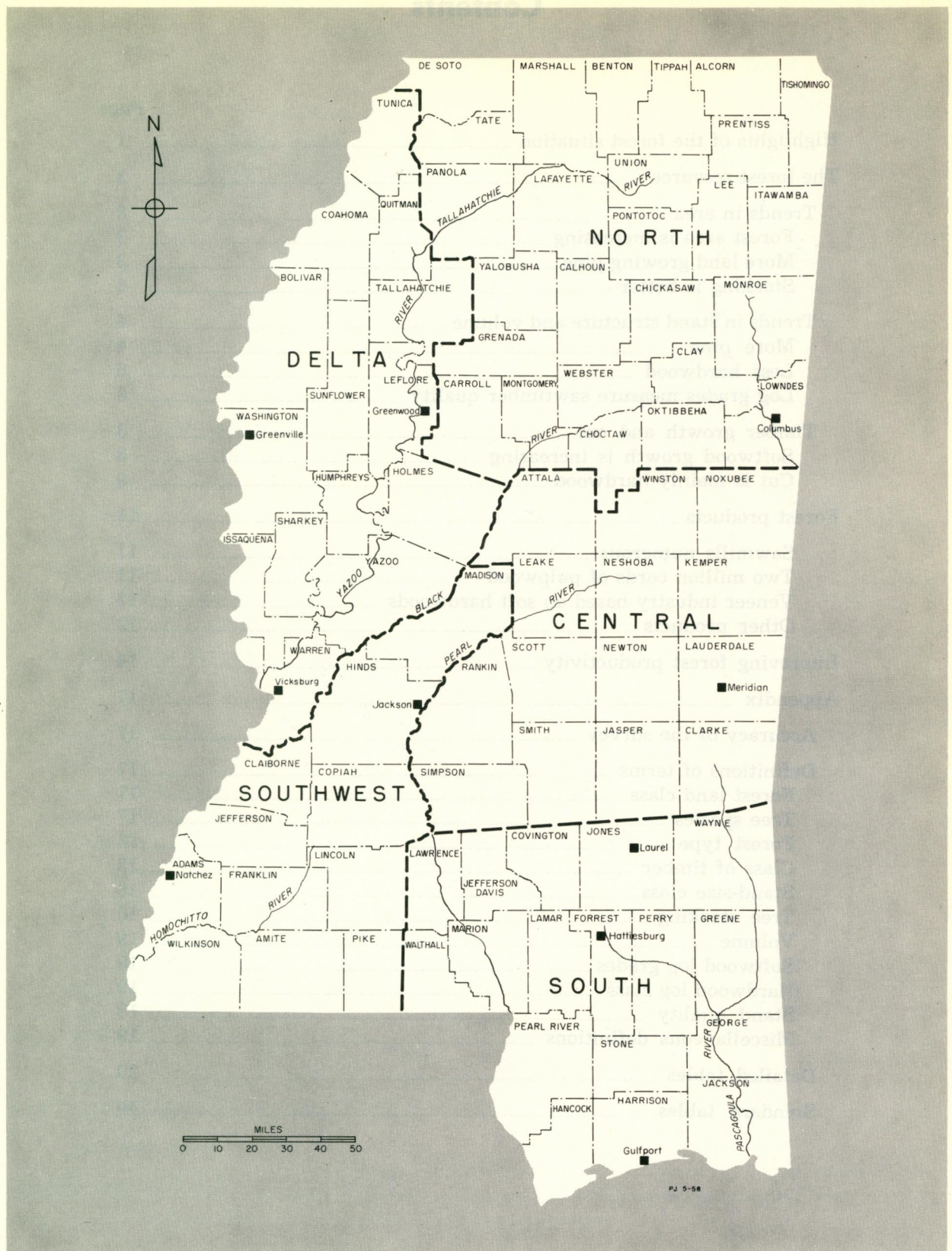


Figure 1. Forest Survey regions in Mississippi.



## Highlights of the Forest Situation

This report presents the principal findings of the third Forest Survey of Mississippi. The survey, which was undertaken as one phase of the nationwide inventory being conducted by the U. S. Forest Service, was designed to provide up-to-date information on the kind, amount, and condition of forest resources; the industries they support; and the possibilities for improving wood production. Comparison with the inventory that was completed in 1948 helps to clarify timber trends.

The decade that elapsed between the 1948 and 1957 surveys witnessed many changes. Shifts in land use and changes in product demand, timber growth, cutting, management, and many other factors importantly affected Mississippi's forest resources. Some of these improved the ability of the forests to supply industry with the kind and volume of timber it needs; others did not.

Reflecting the expansion of the pulp industry, production of pulpwood reached an all-time high. A new multi-million dollar pulp mill was established at Natchez (fig. 1), and existing mills were enlarged. Further expansion of pulping capacity both within the State and in neighboring areas points to new highs in future pulpwood output. Especially noteworthy has been the phenomenal increase in the use of hardwoods for pulp; until quite recently the great bulk of the pulpwood was pine.

The number of sawmills in the State has declined. But mills cutting more than 3 million board feet annually now saw a noticeably larger share of the lumber than they did a decade ago. Such mills are usually better able to take advantage of the efficiencies that result in fuller log use and greater profits. Increasing numbers of the large and medium sawmills, for example, are installing equipment for converting their slabs and edging into pulp chips. Formerly these coarse residues were largely regarded as unavoidable waste.

Mississippi's important veneer industry, sustained partly by foreign and domestic imports, consumed some 17 million more board feet of logs in 1956 than it did 10 years earlier. Increasing numbers of the veneer plants, too, are producing pulp chips from residues.

Reflecting demand for preservatively treated poles, piling, and posts, the number of pressure-type treating plants in the State has increased.

In anticipation of greater long-term demand for timber, pine management programs have

been expanded and intensified in many parts of the State, especially on forest industry lands and public holdings. The programs on industrial ownerships, as those of the pulp companies, stem also from need for assured supplies of raw material to protect heavy capital investments. Both public agencies and forest industries are also sponsoring programs of technical assistance to stimulate better practices on small ownerships. Although management has progressed more rapidly in pine than in hardwoods, there are signs of an upsurge of interest in managing industrial hardwoods.

How have these and other trends affected the forest resources of Mississippi?

In brief, the survey shows that pine sawtimber trees, as well as pines of smaller size, are in measurably greater supply today than 10 years ago. Much of the new growth can be profitably reserved to build up stocking, because the historic turn for the better has taken place at a relatively low level of productivity. But with continued improvement of management programs, the immediate outlook is for further increasing supplies of pine.

A major weak spot in the current forest situation is the lack of effective forestry on lands suitable for growing industrial hardwoods, primarily in the bottomlands and loessial bluffs. The bottomland forests, which largely sustain the State's traditional hardwood-using industries, declined noticeably in volume during the past decade. The decline was heaviest in the larger tree sizes, that is, those most suitable for factory lumber, veneer, and cooperage. Land clearing, excessive cutting, and heavy drought-induced mortality largely contributed to the drop.

The greatest opportunities for realizing the full benefit from Mississippi's forest land are in further improving the stocking of pine timber and in extending management to more forest lands adapted to growing industrial hardwood. The most necessary measures are to reduce the growing space occupied by cull trees wherever they are interfering with thrifty timber; to restock to pine several million acres where natural seeding is unlikely; to reduce losses from fire and other destructive agents; and to improve cutting practices so that more land is left in condition to grow high, continuous yields of timber. In general, these needs are most pressing on farm woodlands and other small holdings—lands that comprise 7 out of every 10 forest acres.







# The Forest Resource

## TRENDS IN AREA

### Forest Area Is Increasing

The area occupied by forests in Mississippi is greater than the combined acreage devoted to all other land uses. South Mississippi, where nearly three acres in every four are in forest,<sup>1</sup> is the most heavily timbered region. The Delta, with its highly developed cotton economy, is the least timbered—only one acre in three is wooded. Elsewhere the extent of forest ranges between these two extremes. All together, forests occupy 57 percent, 17.2 million acres, of the State's total land area.

A noteworthy feature of forest landownership is the preponderance of small holdings. Roughly 80 percent of the privately owned forest land is estimated to be in holdings totaling less than 5,000 acres and most of it is in ownerships of less than 500 acres. Small woodlands are typically held as parts of farms. Large timber holdings, of course, are common among basic wood-using industries such as lumber and pulp companies.

Statewide, wood-using industries own about 15 percent of the forest land area, farmers 43, and other private owners 32. The remaining 10 percent is publicly held.

Forests have gained ground during the past 10 years. The biggest change has been in the northern counties. Here, natural restocking on abandoned fields and extensive planting of open areas within the Yazoo River watershed

increased forest acreage 13 percent. In the central and southwestern regions forest area has increased 7 and 11 percent respectively.

The trend toward conversion of farm lands to forest, at a rate in excess of localized land clearing, has not been general throughout the State. In the Delta, for example, land development has been the dominant factor, and forest acreage has declined 6 percent. Forest acreage has also fallen off in south Mississippi. In this region, clearing for pasture, and perhaps other factors, have reduced the forest area 4 percent.

Statewide, the net result of shifting land-use is that present forest area is 4 percent greater than in 1948, when the previous forest inventory was completed. At this rate, Mississippi's forest area is extending at an average of some 70,000 acres annually.

### More Land Growing Pine

The increase of wooded area has been accompanied by notable changes in forest composition (table 1), which partially reflect the results of pine management programs now under way on many properties throughout the State.

The new survey shows that the expansion of hardwood forests at the expense of pine forests—the hardwood “invasion” into a pine economy that has concerned Mississippians for some years—has been reversed. This reversal is largely due to cultural operations aimed at reducing growing space occupied by unwanted hardwoods on areas better suited to growing

<sup>1</sup> Technical terms are defined on pages 17-19.

Table 1. Commercial forest land by forest type (1957) and change since 1948

Region	All types	Change	Soft-wood <sub>1</sub>	Change	Oak-hickory	Change	Bottom-land hardwood <sub>2</sub>	Change
	<i>Thd. acres</i>	<i>Per-cent</i>	<i>Thd. acres</i>	<i>Per-cent</i>	<i>Thd. acres</i>	<i>Per-cent</i>	<i>Thd. acres</i>	<i>Per-cent</i>
North	4,204.0	+13	1,784.1	+74	1,750.9	-18	669.0	+23
Central	3,792.4	+7	2,536.6	+16	777.6	-22	478.2	+36
Southwest	2,746.7	+11	1,458.8	+19	750.4	-15	537.5	+54
South	4,533.4	-4	3,479.9	+19	454.0	-65	599.5	+10
Delta	1,917.1	-6	108.0	+85	337.2	-11	1,471.9	-8
Total	17,193.6	+4	9,367.4	+26	4,070.1	-28	3,756.1	+11

<sub>1</sub> Includes loblolly-shortleaf pine, longleaf-slash pine, and oak-pine types.

<sub>2</sub> Includes oak-gum-cypress and elm-ash-cottonwood types.



pine. Noncommercial deadening of such hardwoods has been undertaken on at least 175,000 acres annually over the past few years. Of this, more than half was on industrial and public holdings.

During the inter-survey period, 1948-57, area of softwood types (both pine and pine-hardwood) increased some 26 percent, or 1.9 million acres. This increase was general over the State. At the same time, the sizable area dominated by oak and hickory in the uplands declined by 29 percent, or 1.6 million acres. In the bottomlands, on the other hand, the acreage of hardwood forests increased about 11 percent. Along the smaller rivers and streams outside of the Delta, farm acreage is reverting to forest faster than it is being cleared. Within the Delta, the opposite is true.

The effect of the acreage changes in major cover types is that pine forests now make up 54 percent of Mississippi's woodland acreage (fig. 2). In 1948 they occupied only 45 percent.

#### Stocking Is Better

Ten years ago timber growth on much of the forest area was severely handicapped by sparse stocking of merchantable and potentially merchantable trees, and by large numbers of cull hardwoods (trees unmerchantable now or in the future as a result of defect, rot, or species). Scarcely a third of the forest land was well stocked, in the sense that it supported at least 70 percent of the number of good trees, both large and small, required for full stocking. Today over half—56 percent to be precise—of the total forest area is well stocked, an increase of over 4 million acres. This compares with a 1952 average of 48 percent well-stocked land in the South as a whole. Much of the change is attributable to improved fire protection, which reduced tree mortality, especially in the smaller sizes.

The extent of well-stocked land increased sharply in all parts of the State. But the biggest improvement has been in the southern counties, where the longleaf-slash pine acreage is concentrated. The wide expanse of barren cutover land that has characterized much of this region since the cutting-out of the old-growth is gradually being reduced as management intensifies. In this part of the State the

area in well-stocked stands has more than doubled since 1948.

Along with the general increase in young trees that has taken place in most stands, cull trees (chiefly hardwoods) have declined in number by some 10 percent. Although culls still make up about one-fourth of the basal area in trees of poletimber size and larger, encouraging progress is being made in reducing this overburden and in freeing growing space for thrifty timber.

### TRENDS IN STAND STRUCTURE AND VOLUME

#### More Pine

Softwood growing stock in Mississippi is up 8 percent since 1948 (table 2). The volume now stands at 3.3 billion cubic feet, of which 97 percent is southern pine. The rest is cypress and eastern redcedar (fig. 3).

Table 2. Growing stock volume (1957) and change since 1948

Region	Softwood		Hardwood	
	Volume	Change	Volume	Change
	Million cu. ft.	Per-cent	Million cu. ft.	Per-cent
North	412.7	+23	1,017.4	+2
Central	990.1	+15	898.9	-34
Southwest	701.6	-3	769.9	-35
South	1,146.3	+13	791.4	+13
Delta	62.6	-47	798.1	-32
Total	3,313.3	+8	4,275.7	-21

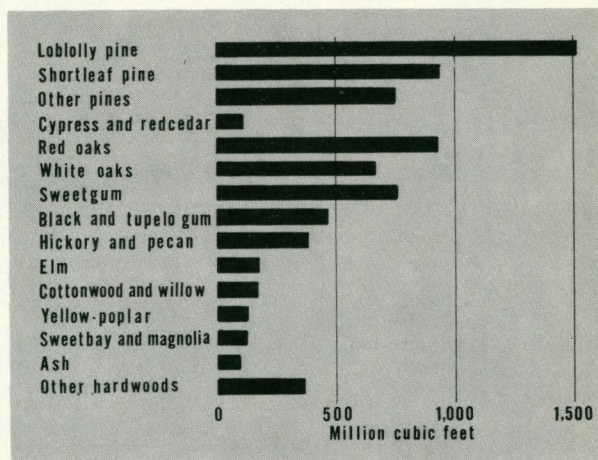


Figure 3. Growing stock by species.



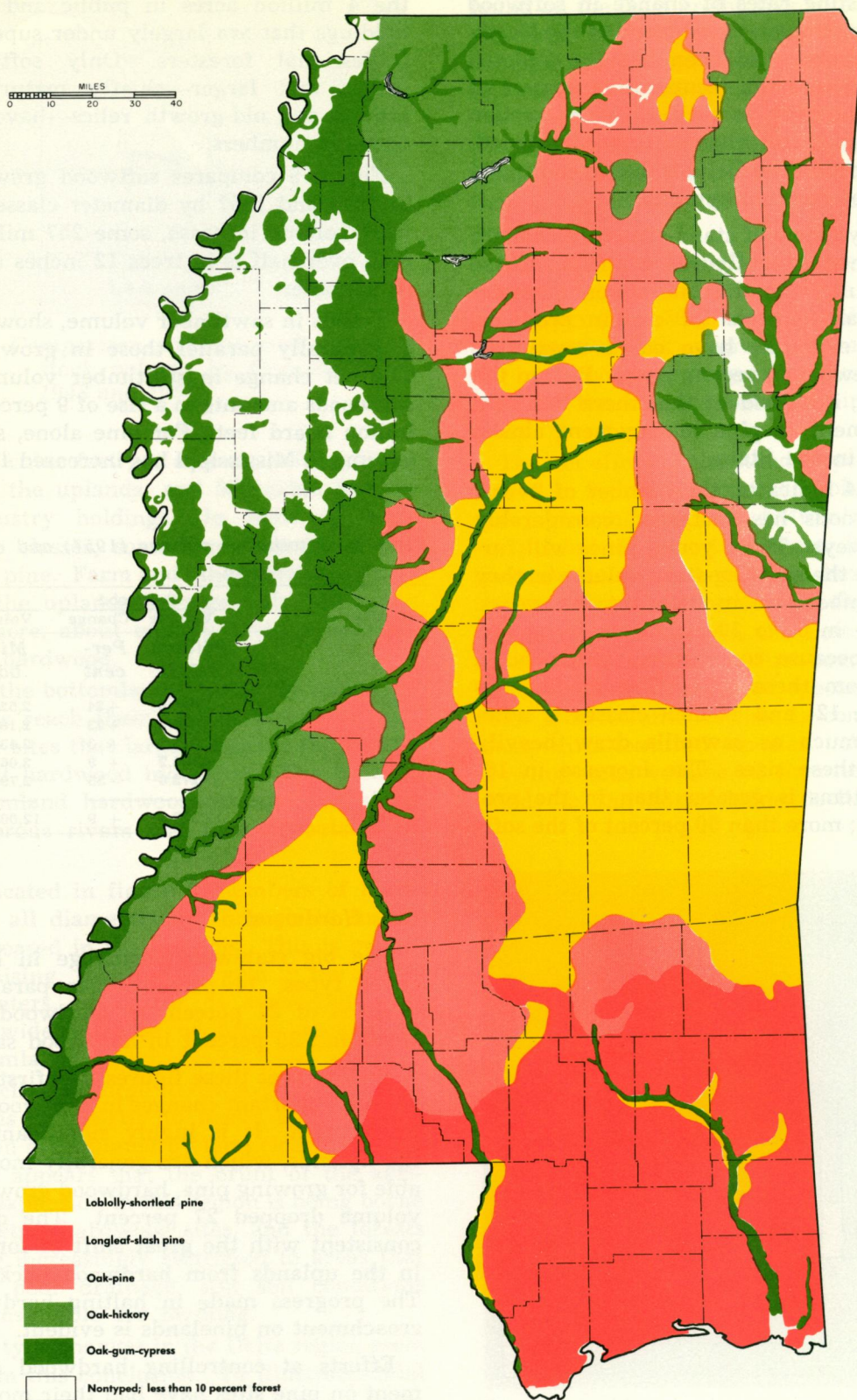


Figure 2. Major forest types in Mississippi.



North Mississippi and the Delta exhibit the most contrasting rates of change in softwood volume. The strong upward trend in the North, where the timber had been heavily depleted by 1948, indicates the recuperative powers of the forest when efforts such as fire protection are strengthened and when cutting is lightened. The sharp drop in the Delta is due to continued liquidation of residual cypress.

A bird's-eye view of stand-structure changes may be gained from figures 4 and 5. These changes result from the interaction of many factors. Weak markets for certain products, lumber for example, have eased sawtimber cutting somewhat in recent years. But on the positive side, it is evident that there has been an improvement in pine management almost everywhere in the State.

As figure 4 indicates, the number of 2- and 4-inch softwoods has increased considerably between surveys. These young pines will further improve the growing-stock volume as they reach poletimber size in the next few years. The increase in 6- to 10-inch trees is no less impressive, because considerable pulpwood is harvested from these sizes. The modest upswing in the 12- and 14-inch classes is noteworthy inasmuch as sawmills draw heavily on trees of these sizes. The increase in 16- to 20-inch stems is greater than in the preceding group; more than 50 percent of the soft-

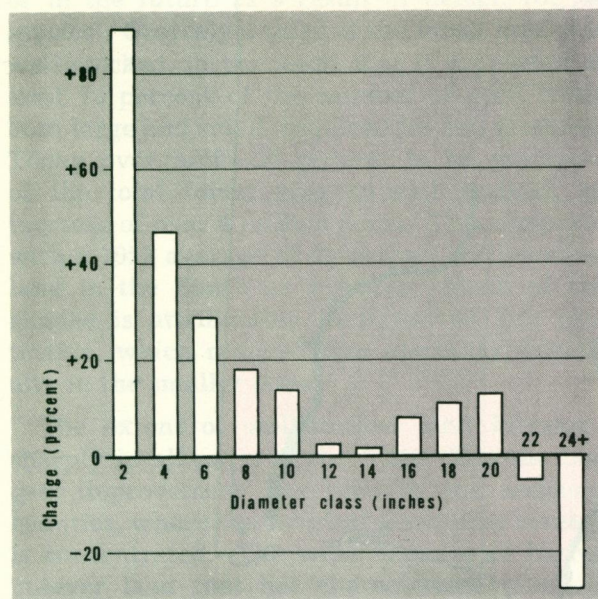


Figure 4. Change in number of softwood growing stock trees between Surveys.

woods in these diameters are concentrated on the 4 million acres in public and industrial holdings that are largely under supervision of professional foresters. Only softwoods 22 inches and larger—chiefly mature second-growth and old-growth relics—have been reduced in numbers.

Figure 5 compares softwood growing stock in 1948 and 1957 by diameter classes. Of the total volume increase, some 257 million cubic feet, over half is in trees 12 inches and larger in diameter.

Trends in sawtimber volume, shown in table 3, generally parallel those in growing stock. The net change in sawtimber volume for all softwoods amounts to a rise of 9 percent, or 1.2 billion board feet. For pine alone, sawtimber volume in Mississippi has increased 12 percent.

Table 3. Sawtimber volume (1957) and change since 1948

Region	Softwood		Hardwood	
	Volume	Change	Volume	Change
	Million bd. ft.	Per- cent	Million bd. ft.	Per- cent
North	1,371.8	+24	2,528.9	-10
Central	3,846.8	+23	2,186.8	-39
Southwest	3,310.8	+3	2,431.1	-41
South	4,735.2	+9	2,063.7	-3
Delta	272.8	-55	2,798.8	-35
Total	13,537.4	+9	12,009.3	-29

### Less Hardwood

The big statewide shrinkage in hardwood cover types, 14 percent, was paralleled by declines of 21 percent in hardwood growing stock and 29 percent in hardwood sawtimber.

To interpret these figures it is first essential to note important changes in hardwood volume by location. It is highly significant that in the uplands, which are generally more profitable for growing pine, hardwood growing-stock volume dropped 27 percent. The decline is consistent with the great shift of forest types in the uplands from hardwood back to pine. The progress made in halting hardwood encroachment on pinelands is evident.

Efforts at controlling hardwood encroachment on pine sites have had their most noticeable results on public and forest-industry holdings. For example, growing stock averages



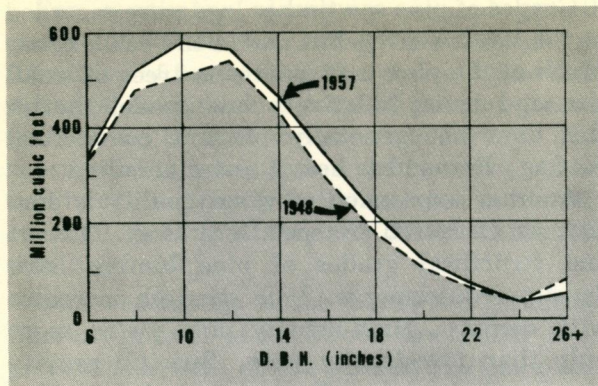


Figure 5. Comparison of softwood growing stock volume by tree diameter, 1948 and 1957.

about 600 cubic feet per acre on publicly held forests in the uplands; and 500 cubic feet on forest-industry holdings. In both of these ownership classes, some three-fourths of the volume is pine. Farm and other private ownerships in the uplands average only 300 cubic feet per acre, about equally divided between pine and hardwood.

It is in the bottomlands that many species of hardwoods reach their best development, and it is these sites that largely sustain the State's traditional hardwood industries. The bulk of the bottomland hardwood acreage lies along the numerous rivers and streams outside of the Delta.

As indicated in figure 6, numbers of hardwoods in all diameters up through 12 inches have increased in the bottoms. This is generally promising. Some of the gain in the smallest diameters, of course, is associated with the statewide increase of forest acreage in the bottomlands.

The decline in large hardwood trees is sizeable. It is due partly to heavy cutting. But it has been accentuated by land clearing in the Delta. It appears that the brunt of the agricultural expansion in this region is being borne by the better hardwood sites, and the forests are being increasingly restricted to areas that flooding, poor drainage, and soil conditions render unsuitable for farming.

Forest type changes in the Delta region seem to confirm this conclusion. To illustrate, total area of bottomland hardwoods in the Delta declined 8 percent during the past decade. During this same period, the acreage of overcup

oak-bitter pecan, a low-value subtype usually found on the least productive bottomland sites, increased 12 percent. Today this refractory subtype accounts for one in every four acres of bottomland hardwoods in the Delta. Ten years ago it made up only one acre in five. Thus, it is likely that forest potential in the Delta bottoms has declined to a greater extent than is suggested by the overall acreage reduction.

From 1952 to 1956 Delta forests especially suffered from a drought such as occurs only once every 25 to 30 years. Available mortality data suggest that as much as three-tenths of the hardwood inventory reduction in the Delta may be the result of drought-induced mortality.

The net effect of the stand-structure changes shown in figure 6 is that the volume of hardwood growing stock on bottomlands in Mississippi fell off some 12 percent. Because large trees declined most heavily, hardwood sawtimber dropped 21 percent in the bottoms.

Hardwood volume in the bottoms is about equally divided between firm-textured species, like oak, and soft-textured species like sweetgum. The volume decline is concentrated among firm-textured species. All together, growing stock volume of firm-textured hardwoods in the bottomlands declined about a

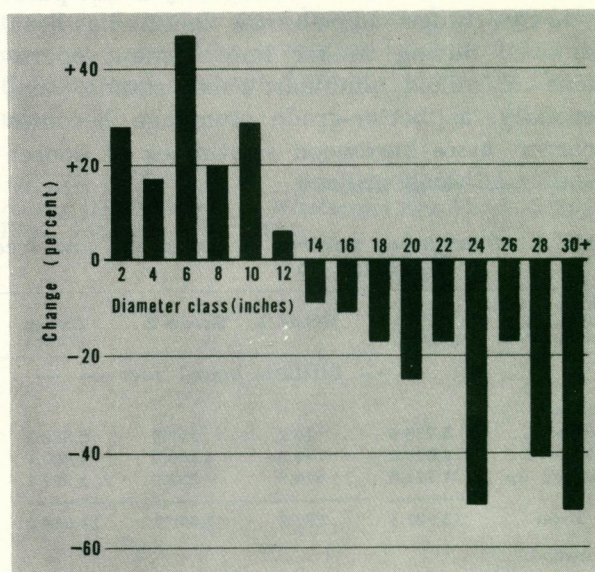


Figure 6. Change in number of hardwood growing stock trees in bottomland types between Surveys.



fifth. Volume in soft-textured hardwoods is nearly the same as in 1948. Thus, soft-textured species make up somewhat more of the hardwood inventory in the bottomlands than they did 10 years ago. This is not an undesirable trend. The soft-textured species found in the bottoms have utility for many purposes. Among other things, they are the prime source of hardwood pulpwood, which is second only to sawlogs (in terms of roundwood volume) among the many industrial hardwood products of Mississippi's forests.

### Log Grades Measure Sawtimber Quality

On both the 1948 and 1957 forest surveys, hardwood sawtimber throughout the State was tallied by log grade. Thus, it is possible to assess this segment of the resource in terms of its suitability for standard factory lumber.

These grades take into account the diameter, length, and amount of defects in individual logs. Grades 1 and 2 logs are normally most in demand because they yield much high-quality material.

Between surveys the volume of better-grade logs—that is, grades 1 and 2—declined 52 percent. Volume in logs of lower grade declined 18 percent. The better-grade logs now make up about 23 percent of the hardwood sawtimber volume (table 4), as against some 34 percent in 1948. That even the poorer-grade hardwood has declined measurably is due partly to two things: some of this volume has been removed during timber improvement operations in mixed pine-hardwood stands; and secondly, as better-grade stumpage becomes scarcer, more hardwood sawtimber of poorer quality is being utilized.

Table 4. Sawtimber volume by log grade and tree diameter, 1957

Species group and d.b.h. class (inches)	All grades	Grade 1	Grade 2	Lower grades
— — Million board feet — —				
Softwood:				
10 to 12	5,756.0	15.7	158.0	5,582.3
14 to 18	6,010.2	40.2	1,109.9	4,860.1
20 and up	1,771.2	211.3	332.8	1,227.1
Total	13,537.4	267.2	1,600.7	11,669.5
Hardwood:				
12	2,506.2	1.5	27.3	2,477.4
14 to 18	6,383.5	146.6	1,141.1	5,095.8
20 and up	3,119.6	501.2	915.2	1,703.2
Total	12,009.3	649.3	2,083.6	9,276.4

Grades of pine sawtimber logs were recorded in the latest survey but not in the earlier one. Much of the pine is presently in trees of small size and hence relatively low grade, though this does not generally prevent commercial cutting. Demand is heavy and diversified.

Another expression of wood quality is density, as measured by specific gravity. Export and structural grades of pine lumber have density requirements. Pole strength increases with density. High-density pine yields more pulp than low-density pine. Specific gravity was determined for all pines sampled in Mississippi. Analysis of these data is incomplete, but it appears that pine density increases from north to south within the State. And, it is estimated that there are more than 6.6 million tons of wood, dry weight, to a 4-inch top in round longleaf pine trees in Mississippi.<sup>2</sup>

## TIMBER GROWTH AND CUT

### Softwood Growth Is Increasing

Fire, insects, disease, and other natural agencies annually kill about 63 million cubic feet of growing stock, chiefly hardwood. Total mortality is equivalent to slightly over 10 percent of the net annual growth of growing stock. When losses from all causes are allowed for, net annual growth totals 333 million cubic feet of softwood and 269 million of hardwood (fig. 7). This equals 35 cubic feet or 0.5 cord per acre per year, which is a growth rate of 8 percent.

<sup>2</sup>Upon completion of analyses, a special report on specific gravity relationships in pine will be issued.

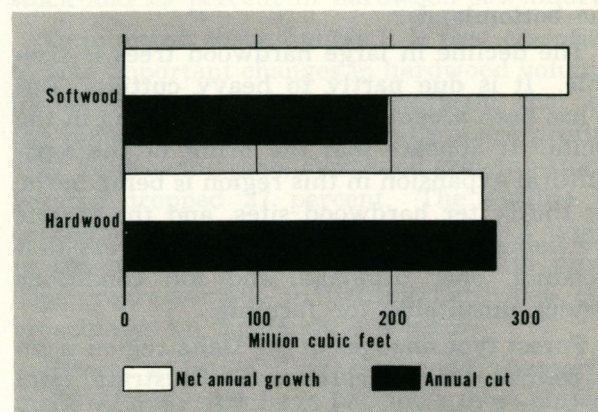


Figure 7. Relationship of growth to annual cut of growing stock.



For sawtimber alone, net annual growth totals 1.3 billion board feet of softwood and 0.8 billion of hardwood. The current growth of softwood sawtimber is some 50 percent greater than at the time of the previous survey. This substantial increase is due partly to the reduction in cut and partly to the increase in number of small trees that annually attain sawtimber size (ingrowth).

Less reassuring is the hardwood situation. Current growth of hardwood sawtimber is 17 percent less than at the time of the prior survey. The trend is desirable to the extent that the reduction of hardwood sawtimber growth has taken place on sites more valuable for pine. But in the Delta, the main producing area of industrial hardwood, growth of hardwood sawtimber is down 35 percent.

In 1948, sawtimber growth for the entire State totaled 110 board feet per acre in softwood types and 92 board feet in hardwood types. Current annual net growth is 154 board feet per acre in softwood types; 88 board feet in hardwood types. Management practices leading to better stocking and lower mortality will, of course, result in measurably higher increments. The possibilities in this respect are suggested by the increased growth per acre achieved in softwood types between surveys. It has been conservatively estimated that the potential growth of Mississippi forest lands is 400 board feet per acre annually.<sup>3</sup>

#### *Cut Is Mainly Hardwood*

All together, logging removed 198 million cubic feet of softwood growing stock and 279 million of hardwood from Mississippi forests in 1956, when the latest cutting statistics were compiled. Virtually all the softwood was pine.

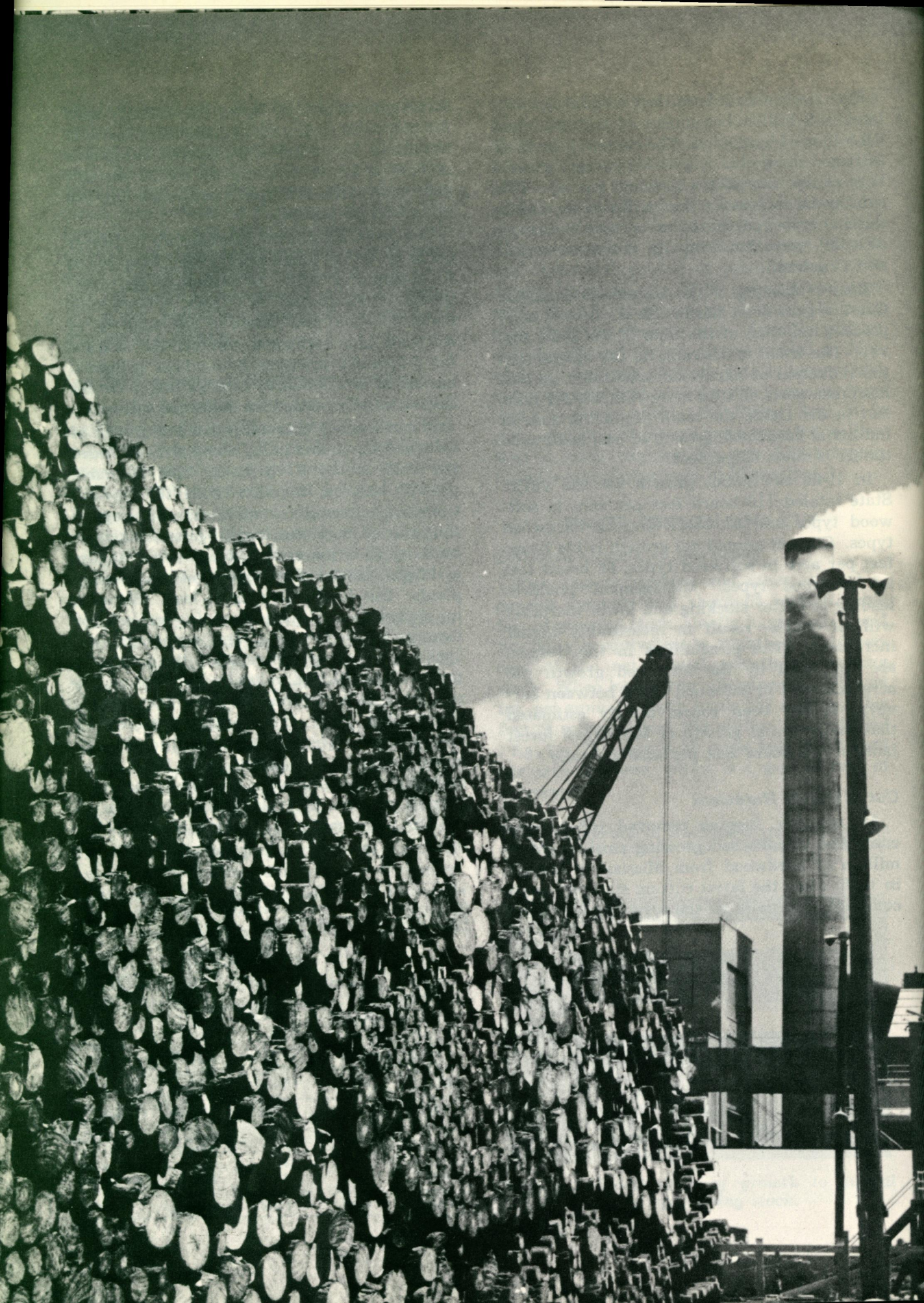
Sweetgum, which is being increasingly used for pulpwood, made up 27 percent of the total hardwood cut; other soft-textured hardwoods accounted for 21 percent; oak for 38 percent; and other firm-textured hardwoods for the remaining 14 percent.

The most significant relationship of timber cut to growth in Mississippi is that of softwoods 12 inches and larger in diameter, and hardwoods 16 inches and up. Trees of these sizes make up about two-thirds of the total cut of softwood and hardwood respectively. Except for pulpwood, products into which industrial hardwood is channelled require larger timber than is usually needed for industrial softwoods.

It is revealing, therefore, that net growth of softwood sawtimber in the above sizes exceeded the 1956 cut by 57 percent. This favorable growth balance, together with the upward trend of softwood inventory, is encouraging. If it can be maintained until pine stocking is built up to a more desirable level it augurs a bright future for dependent wood-using plants. But for hardwoods at least 16 inches in diameter—the sizes most in demand for factory lumber, veneer, and cooperage—the 1956 cut was nearly three times the growth in terms of board-foot volume. In view of the reduction of hardwood inventory that has already taken place, the continuing overcut of large hardwoods indicates that traditional hardwood industries dependent upon local open-market stumpage may be pressed to maintain current production levels, at least in terms of the size and quality of timber presently being used.

<sup>3</sup>*Report of the Temporary Fact-Finding Committee on the Development of Mississippi Resources.* 208pp. Illus. Jackson, Miss. 1957.







## Forest Products

In 1956 the output of logs, bolts, and other timber products in Mississippi totaled 455 million cubic feet—205 million of softwood, 250 million of hardwood.

Sawlogs are still the leading product. Pulpwood has come up rapidly and now ranks a close second. These two items make up 73 percent of the total output (table 5). Fuelwood accounts for another 17 percent. The balance is largely poles, piling, fence posts, hewn ties, and handle stock.

Table 5. *Output of round and split timber products, 1956*

Product	All species	Softwood	Hardwood
	— — — Percent — — —		
Sawlogs	39	47	33
Pulpwood	34	44	27
Veneer	3	...	5
Cooperage	1	...	1
Fuelwood	17	3	29
Poles and piling	2	5	...
Posts	2	1	2
All other	2	(1)	3
Total	100	100	100

(1) Negligible.

### *Sawmills Numerous*

Lumber production in Mississippi reached its zenith of 3 billion board feet in 1925. The era of big production ended abruptly in 1929. By then the old growth was about gone; output hit a low of 0.5 billion in 1932. As the Nation climbed out of the Great Depression of the 1930's, lumber production again rose. War-time demands boosted output to nearly 2 billion board feet in 1942. After World War II, it hit a maximum of 1.5 billion in 1946. Since then, output has declined somewhat and now averages about a billion board feet annually.

Sawmills are by far the most numerous primary wood-processing plants in Mississippi. Though a close count is not available, it is estimated that almost 1,000 commercial sawmills are presently operating. Additionally, a few hundred farm rigs are cutting lumber for domestic use. In 1946, nearly 2,000 sawmills were operating in the State. The decline in number of mills is partially reflected in production trends.

As in most States, a relatively few mills

account for the lion's share of the production. About 70 sawmills cut more than 3 million board feet annually; these mills saw two-fifths of the output of softwood sawlogs and more than half of the hardwood.

In 1956 the total harvest of logs for lumber (including sawn crossties) was slightly over a billion board feet, about equally divided between softwood and hardwood. Oak and gum supplied most of the hardwood. Virtually all the softwood was southern pine, though some cypress and redcedar was sawn.

### *Two Million Cords of Pulpwood*

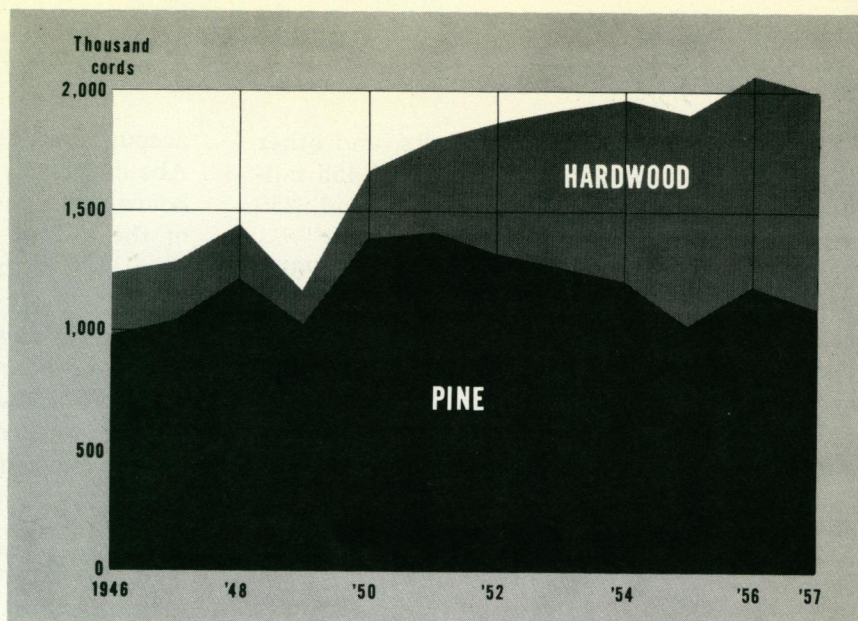
In response to the expansion of the pulp and paper industry, pulpwood production in Mississippi rose from less than 300,000 cords in 1936 to more than 2 million cords in 1956. (Output dipped slightly under 2 million in 1957.) Today pulpwood accounts for a third of the State's total annual roundwood output.

Most notable of all recent pulpwood trends in Mississippi has been the spectacular rise in the use of hardwoods (fig. 8). In the late 1940's, for example, round hardwood pulpwood averaged less than 200,000 cords annually, or 15 percent of the total pulpwood cordage. Production of pulping hardwoods since 1955 has averaged about 880,000 cords annually, or 44 percent of round pulpwood output. It is worth noting that the slight drop in Mississippi's round pulpwood production from 1956 to 1957 was due entirely to a decline in pine; hardwood climbed to a record high of 890,000 cords. About one in every three cords of hardwood pulpwood produced in the entire South is now cut in Mississippi.

Important gains have also been made during the past few years in the use of wood residues, chiefly sawmill slabs and edgings, and veneer cores and trimmings. In 1957 the equivalent of 80,000 cords of pulpwood was produced from pine and hardwood residues in Mississippi. This compares to 67,000 cords in 1956. The residues used in 1957 made up 4 percent of the total pulpwood production. Use of residues is certain to increase. More and more sawmills are installing equipment for converting their coarse waste to pulp chips. In 1955 only



Figure 8. Production of round pulpwood in Mississippi, 1946-57.



one sawmill was reported as producing chips; the latest count is 13. Too, in 1958 at least half of the veneer plants are expected to be making pulp chips from veneer cores and from roundup-waste such as trimmings.

Total daily pulping capacity of Mississippi mills totals 2,900 tons. Construction of new facilities in the southern part of the State may boost capacity another 200 tons by 1959. Facilities for pulping both pine and hardwood are also being expanded in neighboring States. At least a portion of the cordage needed to supply out-of-state capacity will be drawn from Mississippi.

#### Veneer Industry Based On Soft Hardwoods

All veneer manufactured in Mississippi is rotary-cut. Two-fifths of it goes into containers. The rest is largely commercial veneer used, e. g., for plywood and in facing furniture. Logs of somewhat lower quality and smaller minimum diameter can be used for container veneers than for commercial veneers.

The 28 veneer plants get about 70 percent of their raw material from within the State. Output of veneer logs in 1956 totaled 90 million board feet, of which 7 million was shipped out-of-state. About 44 million board feet of veneer logs were imported. The great bulk of the imports were drawn from Alabama, Arkansas, and Louisiana, but some came from as far away as Central America. Thus, Mississippi veneer mills consumed 127 million

board feet of logs in that year, an average of 4.5 million per plant.

Nearly 90 percent of the veneer logs made in Mississippi are from soft-textured hardwoods. In 1956, no pine was reported cut for veneer, whereas in 1946 pine made up 10 percent of the total veneer output. Too, gums and yellow-poplar made up over two-thirds of the veneer output in 1946, but only half in 1956. Other soft-textured hardwoods have largely absorbed the proportionate drop in the above species. The change in usage may be due to limited availability of acceptable timber in species heavily used in the past.

#### Other Products

Mississippi is a top-ranking producer of southern pine poles and piling. In all, some 704,000 pines were cut for these purposes in 1956. The volume was nearly 10 million cubic feet, of which over 60 percent was cut in south Mississippi. Most poles and piling cut within the State are shipped to local wood-preserving plants. Two-thirds of the 24 plants are of the commercial pressure type (fig. 9), and also treat large quantities of lumber, crossties, and fence posts.

Competition from other types of containers is cutting deeply into traditional slack cooperage markets. Tight cooperage output is strongly affected by erratic demand for bourbon barrels. In 1946 the output of cooperage bolts was 104 million board feet, of which 64 million



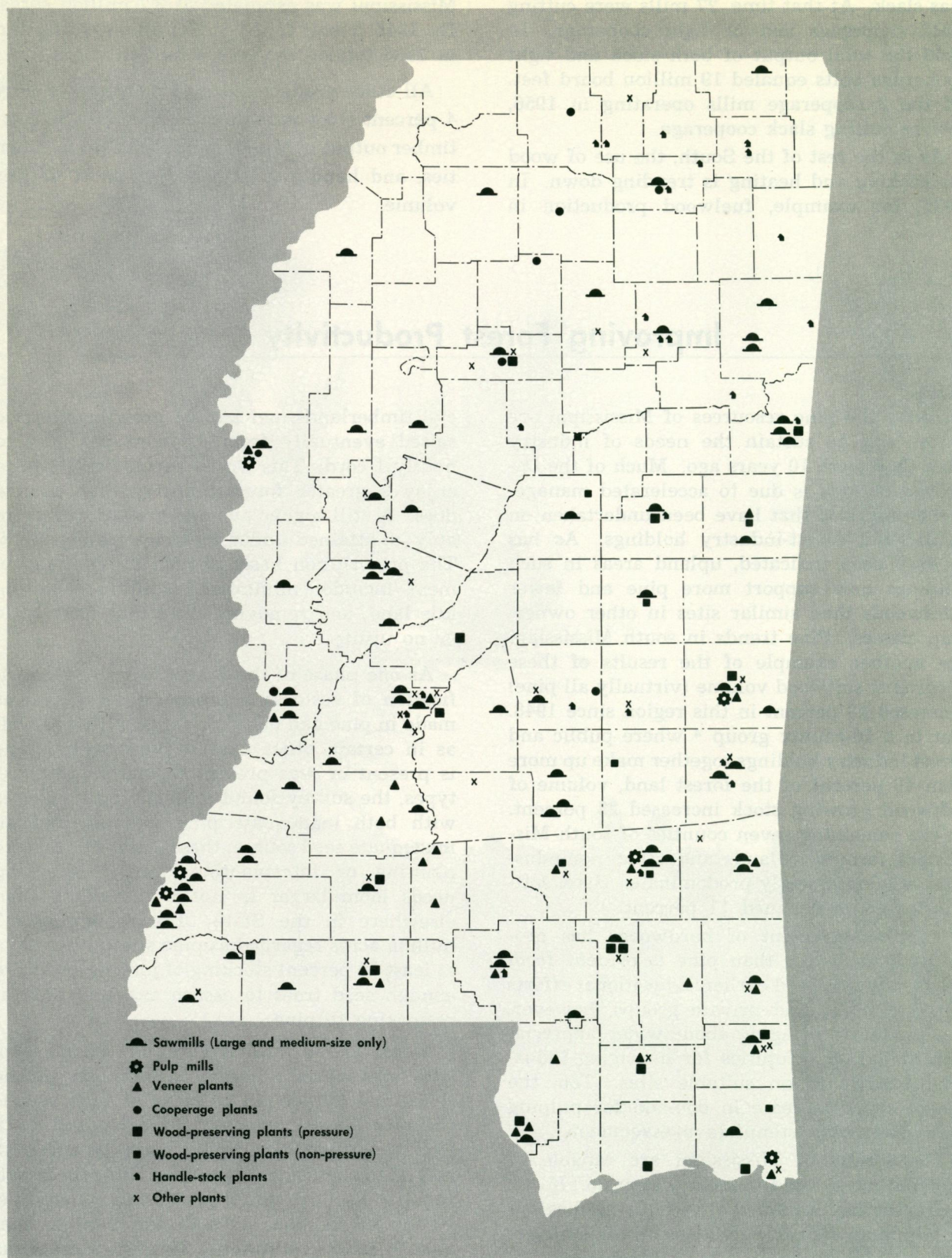


Figure 9. Location of primary wood-using plants in Mississippi, 1956.



was slack. At that time, 27 mills were cutting slack cooperage and 21 tight cooperage. In 1956 the total output of both slack and tight cooperage bolts equaled 19 million board feet. Of the 8 cooperage mills operating in 1956, 5 were cutting slack cooperage.

As in the rest of the South, the use of wood for cooking and heating is trending down. In 1936, for example, fuelwood production in

Mississippi was estimated at 3.7 million cords. By 1946 it had fallen to 2 million cords, and in 1956 totaled scarcely a million cords.

All other products cut in 1956 supplied only 4 percent (15.4 million cubic feet) of the total timber output in Mississippi. Fence posts, hewn ties, and handle stock made up most of this volume.

## Improving Forest Productivity

Today the pine resources of Mississippi are better able to sustain the needs of industry than they were 10 years ago. Much of the improved outlook is due to accelerated management programs that have been undertaken on public and forest-industry holdings. As has already been indicated, upland areas in such holdings now support more pine and fewer hardwoods than similar sites in other ownership classes. Pine trends in south Mississippi are another example of the results of these programs; softwood volume (virtually all pine) increased 13 percent in this region since 1948. But in a 10-county group<sup>4</sup> where public and forest industry holdings together make up more than 40 percent of the forest land, volume of softwood growing stock increased 23 percent. In the remaining seven counties of south Mississippi farm woodlands and other nonindustrial holdings greatly predominate. Here, softwood volume declined 11 percent.

That management of hardwoods has progressed much less than pine is evident from the trends discussed earlier. Educational efforts of both public and private groups, however, are gradually bringing about wider appreciation of the opportunities for managing industrial hardwoods on suitable sites. Too, the recent sharp increase in demand for pulping hardwoods may stimulate management.

The forests of Mississippi are capable of growing more wood than they now do. It can be reasonably assumed that with application of minimum forestry practices on all commer-

cial timberlands, net annual growth might be raised eventually from 0.5 cord per acre to nearly 1 cord. This would permit the State to enjoy a greater forest industry than it now does. A still higher average growth can probably be attained under intensive management. The prescription basic to such forward movement includes minimizing wildfire, planting idle land, and removing trees that have little or no utility.

As one phase of the Forest Survey, a classification of restocking prospects for pine was made in pine and oak-pine forest types, as well as in certain other upland types where pine is present or was present formerly. In these types, the survey found some 5.7 million acres with both inadequate pine stocking and an inadequate seed source; these acres will require planting or interplanting. Such restocking needs loom larger in north Mississippi than elsewhere in the State. The remaining 6.3 million acres regarded as pine sites either have at least 50 percent stocking of pine or else have enough seed trees to assure eventual natural restocking to pine.

More than 9 million acres of upland pine sites still have a hardwood problem in the sense that 20 percent or more of each acre is occupied by hardwoods. Hardwoods 3 to 9 inches in diameter predominate on close to half of this acreage. To control these trees will require use of sprout-preventing chemicals. About 2.6 million acres of the total is adequately stocked with pine. Treating these areas first will prevent the pines from being crowded out.

<sup>4</sup>George, Greene, Hancock, Harrison, Jackson, Lamar, Pearl River, Perry, Stone, and Wayne counties.







The survey found, too, on the more than 5 million acres suitable for growing industrial hardwoods, that two out of every five acres are noticeably encumbered with cull trees. That is, a sixth or more of each acre is dominated by culls. Removing this material would release established growing stock and create openings for new reproduction.

Adequate fire protection is an essential first step in management. Over 14 million acres of forest land are under organized public protection. Some of the larger owners have heavily supplemented the public system with measures of their own. Last year, the best in Mississippi's fire-control history, some 288 thousand acres were burned. Of these, only 59 thousand were under organized protection.

Several other technical measures could contribute to increasing future timber supplies. These are to strengthen facilities for detecting and insuring prompt action against insect out-

breaks; to aim commercial cutting on hardwood sites at stand improvement; and to make the fullest possible use of harvested timber.

It is apparent that planting, cull hardwood control, and intensified fire protection in the magnitude indicated above will require substantial investment. But potential returns will far exceed costs.

The outlook is mixed. It appears that the downward trend of hardwood inventory will continue for some time before conditions stabilize, and recent production levels may not be reached again for 30 years. On the other hand, if pine inventory continues to build up, and if pine management trends continue to accelerate, softwood production can be nearly doubled within the next 30 years. The future increase in softwood production alone may be counted on to pour added millions of dollars each year into Mississippi's economy.





# Appendix

## ACCURACY OF THE SURVEY

The data on forest acreage and timber volume in this report were secured by a systematic sampling method involving a forest-nonforest classification on aerial photographs and on-the-ground measurements of trees at sample points. The sample points were taken in pairs at and near the intersections of a grid of lines spaced 3 miles apart. Tally trees were selected with a 3.03 diopter prism.

Accuracy of the estimates may be affected by two types of errors. The first stems from the use of a sample to estimate the whole and from variability of the items being sampled. This type is termed sampling error; it is susceptible to a mathematical evaluation of the probability of error. The second type of error derives from mistakes in measurement, judgment, arithmetic, or recording, and limitations of method or equipment. Effects of this second type of error—often referred to as reporting or estimating error—cannot be appraised mathematically, but the Forest Survey constantly attempts to hold such error to a minimum by proper training and good supervision, and by emphasis on careful work.

Statistical analysis of the data indicates a sampling error of plus or minus 0.3 percent for the estimate of total forest area, 1.4 percent for total cubic volume, and 1.9 percent for total board-foot volume. As the acreage and volume totals for the State are broken down by forest type, species, county, and other subdivisions of the data, the possibility of error increases and is greatest for the smallest items. The order of this increase is suggested in the following tabulation, which shows the sampling error to which the estimates are liable two chances out of three.

Forest area		Cubic volume		Board-foot volume	
Size of area sampled	Sampling error <sup>1</sup>	Volume sampled	Sampling error <sup>2</sup>	Volume sampled	Sampling error <sup>2</sup>
17,000 M	0.3 %	7,600 MM	1.4 %	26,000 MM	1.9 %
10,000	.4	6,000	1.6	20,000	2.1
5,000	.6	3,000	2.2	10,000	3.0
2,000	.9	1,000	3.8	5,000	4.3
500	1.8	500	5.5	2,000	6.8
100	3.9	100	12.2	300	17.5

<sup>1</sup>By random-sampling formula.

<sup>2</sup>Estimated by use of a procedure described by D. B. DeLury in *Values and Integrals of the Orthogonal Polynomials up to n=26*. Univ. Toronto Press, 33 pp. Toronto, Ont. 1950.

County data on timber volume have been included in the report. Sampling error on growing stock approaches plus or minus 15 percent in counties with 66 million cubic feet of volume. The sampling error for most county estimates of cubic volume will range from plus or minus 8 percent to plus or minus 25 percent. Grouping counties greatly strengthens the total volume data and will be neces-

sary to provide reliable estimates of species-group breakdowns of volume—groupings of a million acres or more of forest land are recommended.

Growth estimates were derived from radial-growth measurements and mortality data taken at sample points. No attempt was made to calculate sampling error in these estimates.

Estimates of annual cut are based on studies conducted during the period of forest inventory. The sampling error to which the total cubic-foot estimate of annual cut is liable, on a probability of two chances out of three, is plus or minus 2.1 percent.

In computing the changes that took place between 1948 and 1957, the data on growing stock volumes from the earlier survey were adjusted to make them as closely comparable as possible to data from the latest survey. This was necessary because of certain basic differences between the two sets of data. In every case, the data from the earlier survey were adjusted to conform to the standards of the latest survey before the change was computed.

## DEFINITIONS OF TERMS

### Forest Land Class

**Forest land.**—Includes: (a) land which is at least 10 percent stocked by trees of any size and capable of producing timber or other wood products, or of exerting an influence on the climate or on the water regime; (b) land from which the trees have been removed to less than 10 percent stocking and which has not been developed for other use; (c) afforested areas.

**Commercial Forest Land.**—Forest land which is (a) producing, or is physically capable of producing, usable crops of wood (usually sawtimber), (b) economically available now or prospectively, and (c) not withdrawn from timber utilization.

**Noncommercial forest land.**—Forest land (a) withdrawn from timber utilization through statute, ordinance, or administrative order but which otherwise qualifies as commercial forest land and (b) incapable of yielding usable wood products (usually sawtimber) because of adverse site conditions, or so physically inaccessible as to be unavailable economically in the foreseeable future.

### Tree Species

**Commercial species.**—Includes species that normally have value for commercial timber products; excludes so-called weed or non-commercial species such as blackjack oak, scrub post oak, blue beech, sourwood, etc.

**Softwoods.**—Coniferous species, of which the most numerous are loblolly pine (*Pinus taeda*); shortleaf pine (*P. echinata*); and longleaf pine



(*P. palustris*).

**Hardwoods.**—Broadleaved species, of which the most numerous are the oaks (*Quercus* spp.) and sweetgum (*Liquidambar styraciflua*).

#### Forest Type

Forest type is determined upon the basis of the predominant species as indicated by cubic volume for sawtimber and poletimber stands, and number of trees for seedling-sapling stands.

**Longleaf-slash pine.**—Forests in which 50 percent or more of the stand is longleaf or slash pine, singly or in combination. Common associates include other southern pines, oak, and gum.

**Loblolly-shortleaf pine.**—Forests in which 50 percent or more of the stand is loblolly pine, shortleaf pine, or other southern yellow pines excepting longleaf or slash pine, singly or in combination. Common associates include oak, hickory, and gum.

**Oak-pine.**—Forests in which 50 percent or more of the stand is hardwoods, usually upland oaks, but in which southern pines make up 25-49 percent of the stand. Common associates include gum, hickory, and yellow-poplar.

**Oak-hickory.**—Forests in which 50 percent or more of the stand is upland oaks or hickory, singly or in combination, except where pines comprise 25-49 percent in which case the stand would be classified oak-pine. Common associates include yellow-poplar, elm, maple, and black walnut.

**Oak-gum-cypress.**—Bottomland forests in which 50 percent or more of the stand is tupelo, blackgum, sweetgum, oaks, or southern cypress, singly or in combination, except where pines comprise 25-49 percent in which case the stand would be classified oak-pine. Common associates include cottonwood, willow, ash, elm, hackberry, and maple.

**Elm-ash-cottonwood.**—Forests in which 50 percent or more of the stand is elm, ash, or cottonwood, singly or in combination. Common associates include willow, sycamore, beech, and maple.

#### Class of Timber

**Sawtimber trees.**—Live trees of commercial species at least 9.0 inches d.b.h. in softwoods and 11.0 inches d.b.h. in hardwoods, that contain at least a 12-foot merchantable butt log—or, if the butt log is a cull, at least 50 percent of the gross sawlog volume is in merchantable logs. To be merchantable, a log must meet the following requirements:

- (a) In softwoods, logs having a minimum 6-inch small-end diameter inside bark and at least one-third sound, with sweep or crook not exceeding two-thirds the small-end diameter.
- (b) In hardwoods, logs having a minimum 8-inch small-end diameter inside bark and which meet the specifications of a standard lumber log or a tie and timber log.

**Poletimber trees.**—Trees of commercial species which meet regional specifications of soundness and form, and which are of the following diameters at breast height: softwoods 5.0 to 9.0 inches; hardwoods 5.0 to 11.0 inches. (Such trees will usually become sawtimber trees if left to grow.)

**Seedling and sapling trees.**—Live trees of commercial species less than 5.0 inches in diameter at breast height and of good form and vigor.

**Cull trees.**—Live trees of sawtimber or poletimber size that are unmerchantable for sawlogs now or prospectively because of defect, rot, or species.

**Rotten cull trees.**—Live trees of sawtimber or poletimber size which fail to meet regional specifications of proportion of sound volume to total volume.

**Sound cull trees.**—Live trees of sawtimber or poletimber size which meet regional specifications of freedom from rot but will not make at least one merchantable sawlog now or prospectively according to regional specifications because of roughness, poor form, or species.

**Hardwood limbs.**—Limbs of hardwood sawtimber trees and sawtimber-size cull hardwood trees to a minimum diameter of 4.0 inches inside bark.

#### Stand-size Class

**Large sawtimber.**—Stands with sawtimber trees having a minimum net volume per acre of 1,500 board feet, International ¼-inch rule, and at least half of this volume in sawtimber trees 15.0 inches d.b.h. and larger.

**Small sawtimber.**—Stands with sawtimber trees having a minimum net volume per acre of 1,500 board feet, International ¼-inch rule, but which do not meet the specifications for large sawtimber.

**Poletimber.**—Stands failing to meet the sawtimber stand specification, but at least 10 percent stocked with poletimber and larger (5.0 inches d.b.h. and larger) trees and with at least half the minimum stocking in poletimber trees.

**Seedling and sapling.**—Stands not qualifying as either sawtimber or poletimber stands, but having at least 10 percent stocking of trees of commercial species and with at least half the minimum stocking in seedling and sapling trees.

**Nonstocked and other areas.**—Commercial forest land not qualifying as sawtimber, poletimber, or seedling and sapling stands.

#### Tree Stocking

Stocking is the extent to which growing space is effectively utilized by present or potential growing-stock trees of commercial species. Stands are considered to be well stocked when the percentage of full stocking is 70 or above, medium stocked when the percentage is 40 to 69, poorly stocked when the percentage is 10 to 39, and nonstocked when the percentage is under 10.



## Volume

**Sawtimber volume.**—Net volume in board feet, International  $\frac{1}{4}$ -inch rule, of live sawtimber trees to a specified merchantable top.

**Growing stock.**—Net volume in cubic feet of live sawtimber and live poletimber trees from stump to a minimum 4.0-inch top diameter (of central stem) inside bark.

**All-timber volume.**—Net volume in cubic feet of live and salvable dead sawtimber trees and poletimber trees of commercial species, and cull trees of all species from stump to a minimum 4.0-inch top inside bark. Includes bole only of softwoods but both bole and limbs of hardwoods to a minimum 4.0-inch diameter inside bark.

## Softwood Log Grades

Softwood log grades are based on the value yield per unit outturn of yard lumber. The value of lumber yield may be expressed relative to the value of No. 2 Common lumber taken as 100 percent. Expressed thus, studies have shown that lumber from grade 1 logs has a value 244 percent as great as No. 2 Common lumber, while the corresponding percentages are 189 percent for grade 2 logs, 142 percent for grade 3 logs, and 107 percent for grade 4 logs. For detailed specifications of log grades, see *Interim log grades for southern pine*, U. S. Forest Service, Southern Forest Experiment Station, 18 pp. 1953.

## Hardwood Log Class

Specifications for standard lumber logs (hardwood log grades 1, 2, and 3) are based on suitability for standard factory lumber. Studies have shown that for nearly all species tested, the yield of No. 1 Common and better lumber in grade 1 logs varies from 65 to 80 percent; in grade 2 logs from 40 to 64 percent; and in grade 3 logs from 13 to 36 percent. For detailed specifications of log grades, see *Hardwood log grades for standard lumber: proposals and results*, U. S. Forest Products Laboratory D1737. 1949.

Tie and timber logs are suitable for ties, timbers, and certain other construction lumber items. Specifications for tie and timber logs are based chiefly

on knot size and log soundness; clear cuttings are not required.

## Stand Quality

**Fair and better.**—A stand in which at least four grade-2 or better logs are present per acre.

**Poor.**—A stand in which fewer than four grade-2 or better logs are present per acre.

## Miscellaneous Definitions

**Farm ownership.**—Private commercial forest land in farms, but excluding lands on which farm operators do not control timber use.

**Basal area.**—Cross-sectional area, including bark, of trees at breast height, measured in square feet.

**D. b. h. (Diameter breast high).**—Tree diameter in inches, outside bark, measured at 4- $\frac{1}{2}$  feet above ground.

**Diameter class.**—The 2-inch diameter classes extend from 1.0 inch below to 0.9 inch above the stated midpoint. Thus, the 12-inch class includes trees 11.0 inches to and including 12.9 inches d.b.h.

**Net annual growth of sawtimber.**—The change during a specified year in net board-foot volume of live sawtimber on commercial forest land resulting from natural causes.

**Net annual growth of growing stock.**—The change during a specified year in net cubic-foot volume of growing stock on commercial forest land resulting from natural causes.

**Annual mortality.**—The net volume, excluding salvage, removed from live sawtimber and from growing stock during a specified year through death from natural causes.

**Annual cut of sawtimber.**—The net board-foot volume of live sawtimber trees cut or killed by logging, and by cultural operations, on commercial forest land during a specified year.

**Annual cut of growing stock.**—The net cubic-foot volume of live sawtimber and poletimber trees cut or killed by logging, or by cultural operations, on commercial forest land during a specified year.

**Timber products output.**—The volume of timber products cut from both growing stock and other sources.



# DETAILED TABLES

Table 6. Forest and nonforest land by Survey region, 1957

Land use	State of Mississippi	North	Central	Southwest	South	Delta
Thousand acres						
Forest:						
Commercial	17,193.6	4,204.0	3,792.4	2,746.7	4,533.4	1,917.1
Noncommercial:						
Productive-reserved	31.5	12.4	6.0	6.6	2.9	3.6
Unproductive	...	...	...	...	...	...
Total forest	17,225.1	4,216.4	3,798.4	2,753.3	4,536.3	1,920.7
Nonforest	12,927.2	3,983.3	2,128.6	1,618.5	1,652.5	3,544.3
All land	30,152.3	8,199.7	5,927.0	4,371.8	6,188.8	5,465.0

Includes some acreage classifiable as water according to Survey standards of area classification but defined by the Bureau of Census as land.

Table 7. Commercial forest land by class of ownership, 1957

Class of ownership	Commercial forest	
	Thousand acres	Percent
Private:		
Farm	7,410.5	43.1
Forest industry	2,514.0	14.6
Other	5,552.2	32.3
Total private	15,476.7	90.0
Public:		
National forest	1,114.9	6.5
Other federal	150.3	.9
State	54.5	.3
County and municipal	397.2	2.3
Total public	1,716.9	10.0
All ownerships	17,193.6	100.0



Table 8. Land area and commercial forest by county, 1957

County	All land	Commercial forest		County	All land	Commercial forest	
	Thousand acres	Thousand acres	Percent		Thousand acres	Thousand acres	Percent
Adams	286.7	216.8	75.6	Lincoln	375.0	234.4	62.5
Alcorn	259.2	134.3	51.8	Lowndes	325.1	144.4	44.4
Amite	466.6	304.2	65.2	Madison	480.6	197.6	41.1
Attala	463.4	276.4	59.6	Marion	352.0	239.4	68.0
Benton	263.7	174.7	66.2	Marshall	443.6	184.7	41.6
Bolivar	586.9	107.7	18.4	Monroe	492.2	264.7	53.8
Calhoun	369.2	209.1	56.6	Montgomery	257.9	154.0	59.7
Carroll	408.3	213.5	52.3	Neshoba	363.5	199.6	54.9
Chickasaw	323.8	150.4	46.4	Newton	371.2	226.1	60.9
Choctaw	266.9	185.6	69.5	Noxubee	444.8	214.4	48.2
Claiborne	311.0	223.5	71.9	Oktibbeha	290.6	150.8	51.9
Clarke	446.1	332.5	74.5	Panola	436.5	135.3	31.0
Clay	265.0	121.0	45.7	Pearl River	530.0	348.7	65.8
Coahoma	364.8	94.1	25.8	Perry	417.9	327.6	78.4
Copiah	499.9	338.4	67.7	Pike	262.4	142.0	54.1
Covington	266.2	149.1	56.0	Pontotoc	320.6	143.1	44.6
De Soto	283.5	74.7	26.3	Prentiss	267.5	137.0	51.2
Forrest	300.2	210.4	70.1	Quitman	263.7	64.3	24.4
Franklin	363.5	288.2	79.3	Rankin	512.0	359.9	70.3
George	307.8	251.5	81.7	Scott	393.6	253.8	64.5
Greene	465.9	390.4	83.8	Sharkey	279.0	132.1	47.3
Grenada	251.0	165.8	66.1	Simpson	375.7	252.8	67.3
Hancock	310.4	249.3	80.3	Smith	410.9	258.0	62.8
Harrison	374.4	285.4	76.2	Stone	286.7	247.2	86.2
Hinds	561.3	241.9	43.1	Sunflower	443.5	49.3	11.1
Holmes	489.0	222.9	45.6	Tallahatchie	412.2	150.7	36.6
Humphreys	262.4	101.0	38.5	Tate	245.1	68.7	28.0
Issaquena	265.6	160.7	60.5	Tippah	297.0	162.4	54.7
Itawamba	346.2	226.7	65.5	Tishomingo	288.6	195.2	67.6
Jackson	476.2	380.2	79.8	Tunica	293.1	91.4	31.2
Jasper	437.1	288.1	65.9	Union	270.1	122.5	45.4
Jefferson	332.8	231.4	69.5	Walthall	257.9	133.6	51.8
Jefferson Davis	265.0	145.2	54.8	Warren	362.2	233.2	64.4
Jones	451.8	300.5	66.5	Washington	465.9	108.3	23.2
Kemper	484.5	332.3	68.6	Wayne	529.3	434.6	82.1
Lafayette	387.8	236.3	60.9	Webster	266.2	176.5	66.3
Lamar	320.0	248.3	77.6	Wilkinson	432.0	328.3	76.0
Lauderdale	461.4	329.9	71.5	Winston	387.8	244.2	63.0
Lawrence	277.1	192.0	69.3	Yalobusha	282.9	184.2	65.1
Leake	375.0	224.4	59.8	Yazoo	600.4	307.1	51.1
Lee	291.2	88.4	30.4				
Leflore	376.3	94.3	25.1	All counties	30,152.3	17,193.6	57.0



Table 9. Commercial forest land by stand-size and forest type, by Survey region, 1957

Forest type	All stand sizes	Large saw-timber	Small saw-timber	Pole-timber	Seed-ling & sapling	Non-stocked & other areas 1
— — — Thousand acres — — —						
STATE OF MISSISSIPPI						
Softwood types:						
Longleaf-slash pine	2,043.9	47.4	363.1	642.1	631.5	359.8
Loblolly-shortleaf pine	4,596.1	431.3	1,004.4	1,623.2	1,487.7	49.5
Oak-pine	2,727.4	158.0	292.7	1,208.4	1,026.7	41.6
Total	9,367.4	636.7	1,660.2	3,473.7	3,145.9	450.9
Hardwood types:						
Oak-hickory	4,070.1	317.1	398.1	1,975.1	1,245.9	133.9
Elm-ash-cottonwood	482.3	135.9	52.2	188.0	88.2	18.0
Oak-gum-cypress	3,273.8	537.7	419.6	1,457.6	808.5	50.4
Total	7,826.2	990.7	869.9	3,620.7	2,142.6	202.3
All types	17,193.6	1,627.4	2,530.1	7,094.4	5,288.5	653.2
NORTH						
Softwood types:						
Longleaf-slash pine	...	...	...	...	...	...
Loblolly-shortleaf pine	955.8	31.4	151.5	343.4	409.4	20.1
Oak-pine	828.3	7.6	49.9	353.5	409.5	7.8
Total	1,784.1	39.0	201.4	696.9	818.9	27.9
Hardwood types:						
Oak-hickory	1,750.9	76.4	150.3	838.7	628.5	57.0
Elm-ash-cottonwood	105.4	17.6	11.1	58.3	16.0	2.4
Oak-gum-cypress	563.6	39.4	99.7	251.5	156.6	16.4
Total	2,419.9	133.4	261.1	1,148.5	801.1	75.8
All types	4,204.0	172.4	462.5	1,845.4	1,620.0	103.7
CENTRAL						
Softwood types:						
Longleaf-slash pine	41.5	...	8.7	16.9	15.9	...
Loblolly-shortleaf pine	1,658.8	153.9	412.1	636.8	450.5	5.5
Oak-pine	836.3	70.0	134.7	395.5	233.5	2.6
Total	2,536.6	223.9	555.5	1,049.2	699.9	8.1
Hardwood types:						
Oak-hickory	777.6	51.5	123.2	420.2	177.2	5.5
Elm-ash-cottonwood	7.9	...	2.6	...	2.5	2.8
Oak-gum-cypress	470.3	66.2	84.6	238.3	78.6	2.6
Total	1,255.8	117.7	210.4	658.5	258.3	10.9
All types	3,792.4	341.6	765.9	1,707.7	958.2	19.0
SOUTHWEST						
	29.6	6.5	17.2	2.7	3.2	...
	963.9	136.7	205.4	350.1	265.2	6.5
	465.3	48.7	46.7	188.9	162.4	18.6
Total	1,458.8	191.9	269.3	541.7	430.8	25.1
	750.4	96.3	85.5	420.8	144.5	3.3
	78.2	17.6	5.9	51.8	2.9	...
	459.3	108.0	57.1	176.2	108.3	9.7
Total	1,287.9	221.9	148.5	648.8	255.7	13.0
All types	2,746.7	413.8	417.8	1,190.5	686.5	38.1
SOUTH						
	1,972.8	40.9	337.2	622.5	612.4	359.8
	958.5	103.8	227.8	286.5	323.0	17.4
	548.6	26.2	61.4	243.1	205.3	12.6
Total	3,479.9	170.9	626.4	1,152.1	1,140.7	389.8
	454.0	15.8	16.1	190.3	165.9	65.9
	28.3	...	5.7	19.7	2.9	...
	571.2	75.2	97.2	278.0	120.8	...
Total	1,053.5	91.0	119.0	488.0	289.6	65.9
All types	4,533.4	261.9	745.4	1,640.1	1,430.3	455.7
DELTA						
	...	...	...	...	...	...
	59.1	5.5	7.6	6.4	39.6	...
	48.9	5.5	...	27.4	16.0	...
Total	108.0	11.0	7.6	33.8	55.6	...
	337.2	77.1	23.0	105.1	129.8	2.2
	262.5	100.7	26.9	58.2	63.9	12.8
	1,209.4	248.9	81.0	513.6	344.2	21.7
Total	1,809.1	426.7	130.9	676.9	537.9	36.7
All types	1,917.1	437.7	138.5	710.7	593.5	36.7

1 Includes areas not classified elsewhere.



Table 10. Commercial forest land by degree of tree stocking and forest type, by Survey region, 1957

Forest type	All stocking	Well stocked	Medium stocked	Poorly stocked	Non- stocked	All stocking	Well stocked	Medium stocked	Poorly stocked	Non- stocked
— — — Thousand acres — — —						— — — Thousand acres — — —				
STATE OF MISSISSIPPI						SOUTHWEST				
Softwood types:										
Longleaf-slash pine	2,043.9	658.3	586.2	488.0	311.4	29.6	21.6	8.0	...	...
Loblolly-shortleaf pine	4,596.1	2,919.5	1,169.9	467.0	39.7	9,63.9	658.2	221.0	81.4	3.3
Oak-pine	2,727.4	1,314.3	911.4	479.9	21.8	465.3	288.9	118.3	51.9	6.2
Total	9,367.4	4,892.1	2,667.5	1,434.9	372.9	1,458.8	968.7	347.3	133.3	9.5
Hardwood types:										
Oak-hickory	4,070.1	2,361.9	1,030.4	558.4	119.4	750.4	547.9	135.9	63.3	3.3
Elm-ash-cottonwood	482.3	284.5	115.1	77.2	5.5	78.2	41.7	24.0	12.5	...
Oak-gum-cypress	3,273.8	2,062.9	832.3	353.0	25.6	459.3	271.1	133.2	55.0	...
Total	7,826.2	4,709.3	1,977.8	988.6	150.5	1,287.9	860.7	293.1	130.8	3.3
All types	17,193.6	9,601.4	4,645.3	2,423.5	523.4	2,746.7	1,829.4	640.4	264.1	12.8
NORTH						SOUTH				
Softwood types:										
Longleaf-slash pine	...	...	...	...	...	1,972.8	618.1	569.4	473.9	311.4
Loblolly-shortleaf pine	955.8	529.6	301.4	106.4	18.4	958.5	610.1	220.8	115.1	12.5
Oak-pine	828.3	321.4	334.5	164.6	7.8	548.6	231.7	208.8	102.9	5.2
Total	1,784.1	851.0	635.9	271.0	26.2	3,479.9	1,459.9	999.0	691.9	329.1
Hardwood types:										
Oak-hickory	1,750.9	1,005.5	462.8	232.5	50.1	454.0	185.3	97.9	109.9	60.9
Elm-ash-cottonwood	105.4	55.6	30.7	19.1	...	28.3	5.8	19.6	2.9	...
Oak-gum-cypress	563.6	373.4	133.0	45.6	11.6	571.2	345.7	148.9	76.6	...
Total	2,419.9	1,434.5	626.5	297.2	61.7	1,053.5	536.8	266.4	189.4	60.9
All types	4,204.0	2,285.5	1,262.4	568.2	87.9	4,533.4	1,996.7	1,265.4	881.3	390.0
CENTRAL						DELTA				
Softwood types:										
Longleaf-slash pine	41.5	18.6	8.8	14.1	...	...	...	...	...	...
Loblolly-shortleaf pine	1,658.8	1,101.0	393.6	158.7	5.5	59.1	20.6	33.1	5.4	...
Oak-pine	836.3	449.0	238.9	145.8	2.6	48.9	23.3	10.9	14.7	...
Total	2,536.6	1,568.6	641.3	318.6	8.1	108.0	43.9	44.0	20.1	...
Hardwood types:										
Oak-hickory	777.6	497.0	192.9	84.8	2.9	337.2	126.2	140.9	67.9	2.2
Elm-ash-cottonwood	7.9	2.6	...	5.3	...	262.5	178.8	40.8	37.4	5.5
Oak-gum-cypress	470.3	309.9	117.8	42.6	...	1,209.4	762.8	299.4	133.2	14.0
Total	1,255.8	809.5	310.7	132.7	2.9	1,809.1	1,067.8	481.1	238.5	21.7
All types	3,792.4	2,378.1	952.0	451.3	11.0	1,917.1	1,111.7	525.1	258.6	21.7



Table 11. Area of sawtimber stands by stand quality and forest type, by Survey region, 1957

Forest type	All qualities	Fair or better	Poor	All qualities	Fair or better	Poor
Thousand acres				Thousand acres		
STATE OF MISSISSIPPI				SOUTHWEST		
Softwood types:						
Longleaf-slash pine	410.5	96.1	314.4	23.7	11.9	11.8
Loblolly-shortleaf pine	1,435.7	626.0	809.7	342.1	164.1	178.0
Oak-pine	450.7	114.7	336.0	95.4	27.6	67.8
Total	2,296.9	836.8	1,460.1	461.2	203.6	257.6
Hardwood types:						
Oak-hickory	715.2	223.7	491.5	181.8	85.2	96.6
Elm-ash-cottonwood	188.1	131.1	57.0	23.5	17.6	5.9
Oak-gum-cypress	957.3	481.1	476.2	165.1	90.6	74.5
Total	1,860.6	835.9	1,024.7	370.4	193.4	177.0
All types	4,157.5	1,672.7	2,484.8	831.6	397.0	434.6
NORTH				SOUTH		
Softwood types:						
Longleaf-slash pine	...	...	...	378.1	84.2	293.9
Loblolly-shortleaf pine	182.9	77.9	105.0	331.6	138.2	193.4
Oak-pine	57.5	10.8	46.7	87.6	33.5	54.1
Total	240.4	88.7	151.7	797.3	255.9	541.4
Hardwood types:						
Oak-hickory	226.7	62.1	164.6	31.9	16.1	15.8
Elm-ash-cottonwood	28.7	17.9	10.8	5.7	5.7	...
Oak-gum-cypress	139.1	84.0	55.1	172.4	91.6	80.8
Total	394.5	164.0	230.5	210.0	113.4	96.6
All types	634.9	252.7	382.2	1,007.3	369.3	638.0
CENTRAL				DELTA		
Softwood types:						
Longleaf-slash pine	8.7	...	8.7	...	...	...
Loblolly-shortleaf pine	566.0	240.8	325.2	13.1	5.0	8.1
Oak-pine	204.7	42.8	161.9	5.5	...	5.5
Total	779.4	283.6	495.8	18.6	5.0	13.6
Hardwood types:						
Oak-hickory	174.7	14.7	160.0	100.1	45.6	54.5
Elm-ash-cottonwood	2.6	2.6	...	127.6	87.3	40.3
Oak-gum-cypress	150.8	45.9	104.9	329.9	169.0	160.9
Total	328.1	63.2	264.9	557.6	301.9	255.7
All types	1,107.5	346.8	760.7	576.2	306.9	269.3



Table 12. Basal area per acre of growing stock and cull trees by forest type and Survey region, 1957

Forest type	State of Mississippi	North	Central	Southwest	South	Delta
— — — — — Square feet — — — — —						
Longleaf-slash pine:						
2- and 4-inch good trees <sup>1</sup>	5.5	...	7.3	4.6	5.5	...
Growing stock	20.3	...	14.0	35.2	20.1	...
2- and 4-inch poor trees	2.2	...	.4	2.9	2.3	...
Cull trees	3.4	...	6.7	4.9	3.3	...
All trees	31.4	...	28.4	47.6	31.2	...
Loblolly-shortleaf pine:						
2- and 4-inch good trees <sup>1</sup>	15.9	11.9	18.8	18.7	12.9	9.0
Growing stock	35.8	26.0	38.5	42.6	34.6	25.4
2- and 4-inch poor trees	3.7	4.4	3.4	3.4	3.8	1.5
Cull trees	6.6	7.8	5.7	5.7	7.4	11.7
All trees	62.0	50.1	66.4	70.4	58.7	47.6
Oak-pine:						
2- and 4-inch good trees <sup>1</sup>	11.5	11.5	13.6	9.6	8.8	20.5
Growing stock	27.1	23.1	30.0	28.5	27.4	27.5
2- and 4-inch poor trees	5.0	7.3	3.6	4.8	3.4	10.0
Cull trees	10.1	12.2	8.6	9.6	9.9	9.7
All trees	53.7	54.1	55.8	52.5	49.5	67.7
Oak-hickory:						
2- and 4-inch good trees <sup>1</sup>	10.1	10.2	11.7	11.3	7.4	6.8
Growing stock	26.9	24.4	32.0	31.6	20.4	27.6
2- and 4-inch poor trees	7.5	7.8	4.5	8.1	5.1	14.4
Cull trees	16.9	19.3	10.1	17.2	12.3	25.3
All trees	61.4	61.7	58.3	68.2	45.2	74.1
Elm-ash-cottonwood:						
2- and 4-inch good trees <sup>1</sup>	5.6	5.4	...	7.1	...	6.0
Growing stock	39.3	38.8	32.4	33.1	46.1	40.8
2- and 4-inch poor trees	7.4	5.7	6.1	12.4	.8	7.4
Cull trees	17.3	24.1	27.8	9.9	25.6	15.5
All trees	69.6	74.0	66.3	62.5	72.5	69.7
Oak-gum-cypress:						
2- and 4-inch good trees <sup>1</sup>	9.1	7.3	11.5	7.3	12.2	8.2
Growing stock	37.6	36.2	42.3	43.1	49.4	28.9
2- and 4-inch poor trees	8.5	9.7	6.5	8.1	8.0	9.1
Cull trees	20.5	19.5	15.9	21.0	21.6	22.0
All trees	75.7	72.7	76.2	79.5	91.2	68.2
All types:						
2- and 4-inch good trees <sup>1</sup>	11.0	10.3	15.1	12.7	8.5	8.0
Growing stock	30.9	26.4	35.5	36.9	28.0	30.1
2- and 4-inch poor trees	5.6	7.2	4.0	6.0	3.7	9.6
Cull trees	12.2	15.4	8.6	12.2	8.3	21.1
All trees	59.7	59.3	63.2	67.8	48.5	68.8

<sup>1</sup> Includes only sound, well-formed trees.



Table 13. Total volume by class of timber and species, by Survey region, 1957

Species	All timber	Growing stock				Hardwood limbs	Cull trees
		Total growing stock	Sawtimber trees		Pole- timber trees		
			Sawlog portions	Upper stems			
— — — — — Thousand cords — — — — —							
STATE OF MISSISSIPPI							
Softwood:							
Loblolly pine	20,349	20,191	14,443	1,341	4,407	...	158
Shortleaf pine	12,553	12,469	7,337	746	4,386	...	84
Longleaf pine	5,507	5,496	3,606	390	1,500	...	11
Slash pine	3,228	3,205	2,168	200	837	...	23
Other pines	1,297	1,288	969	106	213	...	9
Other softwoods	1,743	1,528	1,211	157	160	...	215
Total	44,677	44,177	29,734	2,940	11,503	...	500
Hardwood:							
Red oaks	22,911	13,895	5,998	2,235	5,662	2,281	6,735
White oaks	15,623	9,921	4,156	1,559	4,206	1,519	4,183
Hickory	9,057	5,750	2,808	1,012	1,930	864	2,443
Sweetgum	14,216	11,222	4,640	1,575	5,007	453	2,541
Black and tupelo gums	8,847	6,928	3,274	942	2,712	332	1,587
Other hardwoods	28,434	16,101	7,970	2,518	5,613	1,993	10,340
Total	99,088	63,817	28,846	9,841	25,130	7,442	27,829
All species	143,765	107,994	58,580	12,781	36,633	7,442	28,329
NORTH							
Softwood:							
Loblolly pine	1,324	1,311	783	91	437	...	13
Shortleaf pine	4,087	4,024	2,185	212	1,627	...	63
Longleaf pine	...	...	...	...	...	...	...
Slash pine	...	...	...	...	...	...	...
Other pines	...	...	...	...	...	...	...
Other softwoods	181	168	104	17	47	...	13
Total	5,592	5,503	3,072	320	2,111	...	89
Hardwood:							
Red oaks	6,213	3,574	1,534	557	1,483	583	2,056
White oaks	5,621	3,421	1,297	500	1,624	452	1,748
Hickory	2,607	1,545	609	232	704	194	868
Sweetgum	3,910	2,834	1,078	368	1,388	103	973
Black and tupelo gums	1,390	924	410	116	398	42	424
Other hardwoods	5,881	2,887	1,190	376	1,321	360	2,634
Total	25,622	15,185	6,118	2,149	6,918	1,734	8,703
All species	31,214	20,688	9,190	2,469	9,029	1,734	8,792
CENTRAL							
Softwood:							
Loblolly pine	7,544	7,485	5,144	527	1,841	...	59
Shortleaf pine	4,884	4,879	2,781	295	1,803	...	5
Longleaf pine	231	231	124	12	95	...	...
Slash pine	...	...	...	...	...	...	...
Other pines	509	506	389	37	80	...	3
Other softwoods	108	100	75	9	16	...	8
Total	13,276	13,201	8,513	880	3,808	...	75
Hardwood:							
Red oaks	4,809	3,060	1,166	403	1,491	430	1,319
White oaks	3,785	2,697	1,050	338	1,309	300	788
Hickory	1,901	1,305	556	213	536	149	447
Sweetgum	3,496	3,009	1,060	330	1,619	85	402
Black and tupelo gums	1,873	1,613	734	206	673	61	199
Other hardwoods	3,014	1,733	749	224	760	175	1,106
Total	18,878	13,417	5,315	1,714	6,388	1,200	4,261
All species	32,154	26,618	13,828	2,594	10,196	1,200	4,336



Table 13. Total volume by class of timber and species, by Survey region, 1957  
(Continued)

Species	All timber <sub>1</sub>	Growing stock				Hardwood limbs	Cull trees
		Total growing stock	Sawtimber trees		Pole- timber trees		
			Sawlog portions	Upper stems			
— — — — — Thousand cords — — — — —							
SOUTHWEST							
Softwood:							
Loblolly pine	6,384	6,356	4,808	415	1,133	...	28
Shortleaf pine	1,877	1,875	1,290	116	469	...	2
Longleaf pine	308	308	260	28	20	...	...
Slash pine	...	...	...	...	...	...	...
Other pines	147	147	112	9	26	...	...
Other softwoods	728	669	577	59	33	...	59
Total	9,444	9,355	7,047	627	1,681	...	89
Hardwood:							
Red oaks	4,269	2,763	1,355	484	924	465	1,041
White oaks	2,030	1,264	627	230	407	251	515
Hickory	1,445	1,005	528	188	289	167	273
Sweetgum	2,867	2,264	996	322	946	101	502
Black and tupelo gums	916	746	437	133	176	46	124
Other hardwoods	5,576	3,449	1,797	603	1,049	431	1,696
Total	17,103	11,491	5,740	1,960	3,791	1,461	4,151
All species	26,547	20,846	12,787	2,587	5,472	1,461	4,240
SOUTH							
Softwood:							
Loblolly pine	5,004	4,946	3,635	304	1,007	...	58
Shortleaf pine	1,374	1,372	880	96	396	...	2
Longleaf pine	4,968	4,957	3,222	350	1,385	...	11
Slash pine	3,228	3,205	2,168	200	837	...	23
Other pines	641	635	468	60	107	...	6
Other softwoods	201	169	139	15	15	...	32
Total	15,416	15,284	10,512	1,025	3,747	...	132
Hardwood:							
Red oaks	3,662	2,385	912	301	1,172	315	962
White oaks	1,536	1,136	403	146	587	106	294
Hickory	910	649	379	112	158	88	173
Sweetgum	1,397	1,196	493	145	558	40	161
Black and tupelo gums	4,169	3,328	1,515	424	1,389	155	686
Other hardwoods	5,657	3,118	1,334	421	1,363	221	2,318
Total	17,331	11,812	5,036	1,549	5,227	925	4,594
All species	32,747	27,096	15,548	2,574	8,974	925	4,726
DELTA							
Softwood:							
Loblolly pine	93	93	73	4	16	...	...
Shortleaf pine	331	319	201	27	91	...	12
Longleaf pine	...	...	...	...	...	...	...
Slash pine	...	...	...	...	...	...	...
Other pines	...	...	...	...	...	...	...
Other softwoods	525	422	316	57	49	...	103
Total	949	834	590	88	156	...	115
Hardwood:							
Red oaks	3,958	2,113	1,031	490	592	488	1,357
White oaks	2,651	1,403	779	345	279	410	838
Hickory	2,194	1,246	736	267	243	266	682
Sweetgum	2,546	1,919	1,013	410	496	124	503
Black and tupelo gums	499	317	178	63	76	28	154
Other hardwoods	8,306	4,914	2,900	894	1,120	806	2,586
Total	20,154	11,912	6,637	2,469	2,806	2,122	6,120
All species	21,103	12,746	7,227	2,557	2,962	2,122	6,235

Sound volume in dead trees considered salvable is not included. This volume totals 125 thousand cords.



Table 14. Total volume by class of timber and species, by Survey region, 1957

Species	All timber	Growing stock				Hardwood limbs	Cull trees
		Total growing stock	Sawtimber trees		Pole-timber trees		
			Sawlog portions	Upper stems			
— — — — — Million cubic feet — — — — —							
STATE OF MISSISSIPPI							
Softwood:							
Loblolly pine	1,526.2	1,514.3	1,083.2	100.5	330.6	..	11.9
Shortleaf pine	941.4	935.1	550.3	55.9	328.9	..	6.3
Longleaf pine	413.0	412.2	270.4	29.3	112.5	..	.8
Slash pine	242.1	240.4	162.6	15.0	62.8	..	1.7
Other pines	97.3	96.6	72.7	8.0	15.9	..	.7
Other softwoods	130.8	114.7	90.9	11.8	12.0	..	16.1
Total	3,350.8	3,313.3	2,230.1	220.5	862.7	..	37.5
Hardwood:							
Red oaks	1,535.1	931.0	401.9	149.7	379.4	152.8	451.3
White oaks	1,046.7	664.7	278.5	104.4	281.8	101.8	280.2
Hickory	606.9	385.2	188.1	67.8	129.3	57.9	163.8
Sweetgum	952.5	751.9	310.8	105.6	335.5	30.4	170.2
Black and tupelo gums	592.7	464.2	219.4	63.1	181.7	22.3	106.2
Other hardwoods	1,905.0	1,078.7	534.0	168.7	376.0	133.5	692.8
Total	6,638.9	4,275.7	1,932.7	659.3	1,683.7	498.7	1,864.5
All species	9,989.7	7,589.0	4,162.8	879.8	2,546.4	498.7	1,902.0
NORTH							
Softwood:							
Loblolly pine	99.3	98.3	58.7	6.8	32.8	...	1.0
Shortleaf pine	306.5	301.8	163.9	15.9	122.0	...	4.7
Longleaf pine	...	...	...	...	...	...	...
Slash pine	...	...	...	...	...	...	...
Other pines	...	...	...	...	...	...	...
Other softwoods	13.6	12.6	7.8	1.3	3.5	...	1.0
Total	419.4	412.7	230.4	24.0	158.3	...	6.7
Hardwood:							
Red oaks	416.3	239.5	102.8	37.3	99.4	39.1	137.7
White oaks	376.6	229.2	86.9	33.5	108.8	30.3	117.1
Hickory	174.7	103.5	40.8	15.5	47.2	13.0	58.2
Sweetgum	262.0	189.9	72.2	24.7	93.0	6.9	65.2
Black and tupelo gums	93.1	61.9	27.5	7.8	26.6	2.8	28.4
Other hardwoods	394.0	193.4	79.7	25.2	88.5	24.1	176.5
Total	1,716.7	1,017.4	409.9	144.0	463.5	116.2	583.1
All species	2,136.1	1,430.1	640.3	168.0	621.8	116.2	589.8
CENTRAL							
Softwood:							
Loblolly pine	565.8	561.4	385.8	39.5	136.1	...	4.4
Shortleaf pine	366.3	365.9	208.6	22.1	135.2	...	.4
Longleaf pine	17.3	17.3	9.3	.9	7.1	...	...
Slash pine	...	...	...	...	...	...	...
Other pines	38.2	38.0	29.2	2.8	6.0	...	.2
Other softwoods	8.1	7.5	5.6	.7	1.2	...	.6
Total	995.7	990.1	638.5	66.0	285.6	...	5.6
Hardwood:							
Red oaks	322.2	205.0	78.1	27.0	99.9	28.8	88.4
White oaks	253.6	180.7	70.4	22.6	87.7	20.1	52.8
Hickory	127.4	87.4	37.2	14.3	35.9	10.0	30.0
Sweetgum	234.2	201.6	71.0	22.1	108.5	5.7	26.9
Black and tupelo gums	125.5	108.1	49.2	13.8	45.1	4.1	13.3
Other hardwoods	201.9	116.1	50.2	15.0	50.9	11.7	74.1
Total	1,264.8	898.9	356.1	114.8	428.0	80.4	285.5
All species	2,260.5	1,889.0	994.6	180.8	713.6	80.4	291.1



Table 14. Total volume by class of timber and species, by Survey region, 1957  
(Continued)

Species	All timber	Growing stock				Hardwood limbs	Cull trees
		Total growing stock	Sawtimber trees		Pole- timber trees		
			Sawlog portions	Upper stems			
— — — — — Million cubic feet — — — — —							
SOUTHWEST							
Softwood:							
Loblolly pine	478.8	476.7	360.6	31.1	85.0	...	2.1
Shortleaf pine	140.8	140.6	96.7	8.7	35.2	...	.2
Longleaf pine	23.1	23.1	19.5	2.1	1.5	...	...
Slash pine	...	...	...	...	...	...	...
Other pines	11.0	11.0	8.4	.7	1.9	...	...
Other softwoods	54.6	50.2	43.3	4.4	2.5	...	4.4
Total	708.3	701.6	528.5	47.0	126.1	...	6.7
Hardwood:							
Red oaks	286.0	185.1	90.8	32.4	61.9	31.1	69.8
White oaks	136.0	84.7	42.0	15.4	27.3	16.8	34.5
Hickory	96.8	67.3	35.4	12.6	19.3	11.2	18.3
Sweetgum	192.1	151.7	66.7	21.6	63.4	6.8	33.6
Black and tupelo gums	61.4	50.0	29.3	8.9	11.8	3.1	8.3
Other hardwoods	373.6	231.1	120.4	40.4	70.3	28.9	113.6
Total	1,145.9	769.9	384.6	131.3	254.0	97.9	278.1
All species	1,854.2	1,471.5	913.1	178.3	380.1	97.9	284.8
SOUTH							
Softwood:							
Loblolly pine	375.3	370.9	272.6	22.8	75.5	...	4.4
Shortleaf pine	103.0	102.9	66.0	7.2	29.7	...	.1
Longleaf pine	372.6	371.8	241.6	26.3	103.9	...	.8
Slash pine	242.1	240.4	162.6	15.0	62.8	...	1.7
Other pines	48.1	47.6	35.1	4.5	8.0	...	.5
Other softwoods	15.1	12.7	10.5	1.1	1.1	...	2.4
Total	1,156.2	1,146.3	788.4	76.9	281.0	...	9.9
Hardwood:							
Red oaks	245.4	159.8	61.1	20.2	78.5	21.1	64.5
White oaks	102.9	76.1	27.0	9.8	39.3	7.1	19.7
Hickory	61.0	43.5	25.4	7.5	10.6	5.9	11.6
Sweetgum	93.6	80.1	33.0	9.7	37.4	2.7	10.8
Black and tupelo gums	279.3	223.0	101.5	28.4	93.1	10.4	45.9
Other hardwoods	379.0	208.9	89.4	28.2	91.3	14.8	155.3
Total	1,161.2	791.4	337.4	103.8	350.2	62.0	307.8
All species	2,317.4	1,937.7	1,125.8	180.7	631.2	62.0	317.7
DELTA							
Softwood:							
Loblolly pine	7.0	7.0	5.5	0.3	1.2	...	...
Shortleaf pine	24.8	23.9	15.1	2.0	6.8	...	0.9
Longleaf pine	...	...	...	...	...	...	...
Slash pine	...	...	...	...	...	...	...
Other pines	...	...	...	...	...	...	...
Other softwoods	39.4	31.7	23.7	4.3	3.7	...	7.7
Total	71.2	62.6	44.3	6.6	11.7	...	8.6
Hardwood:							
Red oaks	265.2	141.6	69.1	32.8	39.7	32.7	90.9
White oaks	177.6	94.0	52.2	23.1	18.7	27.5	56.1
Hickory	147.0	83.5	49.3	17.9	16.3	17.8	45.7
Sweetgum	170.6	128.6	67.9	27.5	33.2	8.3	33.7
Black and tupelo gums	33.4	21.2	11.9	4.2	5.1	1.9	10.3
Other hardwoods	556.5	329.2	194.3	59.9	75.0	54.0	173.3
Total	1,350.3	798.1	444.7	165.4	188.0	142.2	410.0
All species	1,421.5	860.7	489.0	172.0	199.7	142.2	418.6

1 Sound volume in dead trees considered salvable is not included. This volume totals 9 million cubic feet.



Table 15. Growing stock by species and Survey region, 1957

Species	State of Mississippi	North	Central	Southwest	South	Delta
— — — — Million cubic feet — — — —						
<b>Softwood:</b>						
Loblolly pine	1,514.3	98.3	561.4	476.7	370.9	7.0
Shortleaf pine	935.1	301.8	365.9	140.6	102.9	23.9
Longleaf pine	412.2	...	17.3	23.1	371.8	...
Slash pine	240.4	...	...	...	240.4	...
Other pines	96.6	...	38.0	11.0	47.6	...
Other softwoods	114.7	12.6	7.5	50.2	12.7	31.7
<b>Total</b>	<b>3,313.3</b>	<b>412.7</b>	<b>990.1</b>	<b>701.6</b>	<b>1,146.3</b>	<b>62.6</b>
<b>Hardwood:</b>						
Black, scarlet, and southern red oaks	398.2	141.4	85.5	77.5	77.3	16.5
Cherrybark, Shumard, and northern red oaks	117.4	36.7	20.5	36.0	6.4	17.8
Water oaks	415.4	61.4	99.0	71.6	76.1	107.3
White oak ( <i>Quercus alba</i> )	295.4	117.9	81.6	46.3	35.6	14.0
Other white oaks	369.3	111.3	99.1	38.4	40.5	80.0
Pecan	98.0	4.7	2.0	21.4	.7	69.2
Other hickories	287.2	98.8	85.4	45.9	42.8	14.3
Sweetgum	751.9	189.9	201.6	151.7	80.1	128.6
Black & tupelo gums	464.2	61.9	108.1	50.0	223.0	21.2
Cottonwood	86.8	6.0	.5	23.0	3.0	54.3
Willow	84.3	20.6	.9	8.2	1.9	52.7
Soft maples	56.5	13.5	13.1	4.8	18.2	6.9
Yellow-poplar	134.9	26.9	27.2	33.9	28.5	18.4
Sweetbay and magnolia	129.3	6.2	4.2	7.9	109.2	1.8
White elm	85.2	15.0	7.2	22.4	1.4	39.2
Other elms	88.9	22.4	16.0	16.2	7.7	26.6
Ash	101.1	30.5	11.3	16.7	9.8	32.8
Hackberry	64.6	10.3	6.8	11.5	4.0	32.0
Beech	67.2	7.5	14.7	34.1	7.3	3.6
Sycamore	68.7	17.5	2.5	18.2	.5	30.0
Other hardwoods	111.2	17.0	11.7	34.2	17.4	30.9
<b>Total</b>	<b>4,275.7</b>	<b>1,017.4</b>	<b>898.9</b>	<b>769.9</b>	<b>791.4</b>	<b>798.1</b>
<b>All species</b>	<b>7,589.0</b>	<b>1,430.1</b>	<b>1,889.0</b>	<b>1,471.5</b>	<b>1,937.7</b>	<b>860.7</b>



Table 16. Distribution of growing stock by species within each forest type, 1957

Species	All types	Longleaf-slash pine	Loblolly-shortleaf pine	Oak-pine	Oak-hickory	Bottomland hardwood types		
						Total	Elm-ash cotton-wood	Oak-gum-cypress
Percent								
Softwood:								
Loblolly pine	20.0	2.2	49.2	21.2	3.1	1.1	...	1.3
Shortleaf pine	12.3	0.5	29.1	17.5	2.6	0.1	...	0.1
Longleaf pine	5.4	55.0	1.3	1.8	0.3	0.1	...	0.1
Slash pine	3.2	33.2	0.1	1.3	...	0.5	...	0.6
Other pines	1.3	...	1.8	3.0	0.7	0.6	...	0.7
Other softwoods	1.5	0.5	0.2	0.9	0.3	4.6	1.8	5.1
Total	43.7	91.4	81.7	45.7	7.0	7.0	1.8	7.9
Hardwood:								
Black, scarlet, and southern red oaks	5.2	2.1	3.3	10.5	13.3	0.6	0.2	0.6
Cherrybark, Shumard, and northern red oaks	1.5	...	0.3	1.7	4.1	1.6	...	1.9
Water oaks	5.5	0.5	1.3	5.2	5.8	12.1	2.7	13.8
White oaks (Quercus alba & michauxii)	4.3	(1)	1.8	6.6	12.4	2.0	0.1	2.3
Other white oaks	4.4	0.6	2.4	6.0	7.9	5.0	0.7	5.7
Pecan	1.3	...	0.1	0.1	0.4	4.4	5.2	4.2
Other hickories	3.8	(1)	1.2	4.5	12.1	1.9	0.5	2.1
Sweetgum	10.0	0.6	4.0	8.5	13.8	18.0	5.0	20.3
Black & tupelo gums	6.1	3.0	2.0	4.7	5.6	13.1	0.6	15.3
Cottonwood	1.1	...	(1)	...	0.3	4.0	23.8	0.6
Willow	1.1	...	...	(1)	(1)	4.1	25.1	0.5
Soft maples	0.7	0.2	0.2	0.4	0.7	1.8	1.0	2.0
Yellow-poplar	1.8	0.2	0.6	1.6	4.5	1.8	0.7	2.0
Sweetbay and magnolia	1.7	1.3	0.3	1.4	0.8	4.4	0.1	5.1
Elm	2.3	...	0.2	0.9	3.2	5.6	6.2	5.5
Ash	1.3	...	0.1	0.7	1.2	3.6	7.3	3.0
Hackberry	0.9	...	(1)	(1)	0.2	3.0	3.9	2.8
Beech	0.9	...	0.2	0.6	2.6	0.9	0.4	1.0
Sycamore	0.9	...	(1)	0.2	1.4	2.3	8.4	1.2
Other hardwoods	1.5	0.1	0.3	0.7	2.7	2.8	6.3	2.2
Total	56.3	8.6	18.3	54.3	93.0	93.0	98.2	92.1
All species	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(1) Negligible.



Table 17. Growing stock by species and stand size, by Survey region, 1957

Species	All stand sizes	Large saw-timber	Small saw-timber	Pole-timber	Seedling and sapling	Nonstocked and other areas
— Million cubic feet —						
STATE OF MISSISSIPPI						
Softwood:						
Loblolly pine	1,514.3	462.9	563.1	393.0	93.1	2.2
Shortleaf pine	935.1	103.8	434.0	316.6	80.4	.3
Longleaf pine	412.2	21.9	186.5	149.8	38.2	15.8
Slash pine	240.4	12.1	131.4	73.2	20.5	3.2
Other pines	96.6	36.9	37.0	17.6	5.1	...
Other softwoods	114.7	71.4	16.2	16.9	7.5	2.7
Total	3,313.3	709.0	1,368.2	967.1	244.8	24.2
Hardwood:						
Red oaks	931.0	197.7	179.1	443.7	105.9	4.6
White oaks	664.7	128.1	162.5	296.7	76.0	1.4
Hickory	385.2	97.7	82.1	168.0	37.2	.2
Sweetgum	751.9	203.5	188.7	281.4	77.5	.8
Black and tupelo gums	464.2	116.1	160.4	166.3	20.9	.5
Other hardwoods	1,078.7	396.7	273.1	336.9	69.6	2.4
Total	4,275.7	1,139.8	1,045.9	1,693.0	387.1	9.9
All species	7,589.0	1,848.8	2,414.1	2,660.1	631.9	34.1
NORTH						
Softwood:						
Loblolly pine	98.3	25.3	17.2	44.7	10.8	0.3
Shortleaf pine	301.8	10.5	132.9	116.0	42.1	.3
Longleaf pine	...	...	...	...	...	...
Slash pine	...	...	...	...	...	...
Other pines	...	...	...	...	...	...
Other softwoods	12.6	4.1	1.5	4.2	2.4	.4
Total	412.7	39.9	151.6	164.9	55.3	1.0
Hardwood:						
Red oaks	239.5	31.1	45.7	126.3	36.1	.3
White oaks	229.2	23.5	58.1	115.3	31.4	.9
Hickory	103.5	5.6	29.6	56.1	12.2	...
Sweetgum	189.9	26.2	56.7	77.1	29.5	.4
Black and tupelo gums	61.9	14.3	22.3	19.1	6.2	...
Other hardwoods	193.4	38.6	61.9	69.7	22.8	.4
Total	1,017.4	139.3	274.3	463.6	138.2	2.0
All species	1,430.1	179.2	425.9	628.5	193.5	3.0
CENTRAL						
Softwood:						
Loblolly pine	561.4	139.1	253.2	148.3	20.8	...
Shortleaf pine	365.9	52.5	171.9	122.9	18.6	...
Longleaf pine	17.3	...	7.9	7.6	1.8	...
Slash pine	...	...	...	...	...	...
Other pines	38.0	14.4	15.2	4.9	3.5	...
Other softwoods	7.5	4.6	...	2.9	...	...
Total	990.1	210.6	448.2	286.6	44.7	...
Hardwood:						
Red oaks	205.0	38.5	58.2	89.1	19.2	...
White oaks	180.7	28.7	57.9	75.8	18.3	...
Hickory	87.4	16.8	24.2	41.6	4.8	...
Sweetgum	201.6	40.3	59.6	88.5	13.0	.2
Black and tupelo gums	108.1	22.4	36.5	44.3	4.9	...
Other hardwoods	116.1	35.1	32.8	44.0	3.5	.7
Total	898.9	181.8	269.2	383.3	63.7	.9
All species	1,889.0	392.4	717.4	669.9	108.4	.9



Table 17. *Growing stock by species and stand size, by Survey region, 1957*  
(Continued)

Species	All stand sizes	Large saw-timber	Small saw-timber	Pole-timber	Seedling and sapling	Nonstocked and other areas <sup>1</sup>
— — — — — Million cubic feet — — — — —						
SOUTHWEST						
Softwood:						
Loblolly pine	476.7	182.6	150.8	113.8	29.5	...
Shortleaf pine	140.6	30.1	65.0	37.8	7.7	...
Longleaf pine	23.1	4.7	12.1	3.0	3.3	...
Slash pine	...	...	...	...	...	...
Other pines	11.0	7.1	1.6	2.0	.3	...
Other softwoods	50.2	39.6	6.8	3.0	.8	...
Total	701.6	264.1	236.3	159.6	41.6	...
Hardwood:						
Red oaks	185.1	50.6	35.9	79.7	18.5	.4
White oaks	84.7	23.4	19.4	35.6	6.3	...
Hickory	67.3	18.3	13.0	29.3	6.7	...
Sweetgum	151.7	59.1	32.3	48.1	12.0	.2
Black and tupelo gums	50.0	24.1	8.1	16.2	1.3	.3
Other hardwoods	231.1	101.3	56.0	63.1	10.7	...
Total	769.9	276.8	164.7	272.0	55.5	.9
All species	1,471.5	540.9	401.0	431.6	97.1	.9
SOUTH						
Softwood:						
Loblolly pine	370.9	111.0	141.9	84.5	31.6	1.9
Shortleaf pine	102.9	9.9	50.5	31.7	10.8	...
Longleaf pine	371.8	17.2	166.5	139.2	33.1	15.8
Slash pine	240.4	12.1	131.4	73.2	20.5	3.2
Other pines	47.6	15.4	20.2	10.7	1.3	...
Other softwoods	12.7	5.5	3.3	1.5	2.4	...
Total	1,146.3	171.1	513.8	340.8	99.7	20.9
Hardwood:						
Red oaks	159.8	24.8	29.0	85.8	16.3	3.9
White oaks	76.1	11.1	16.8	38.7	9.5	...
Hickory	43.5	9.9	8.4	21.4	3.8	...
Sweetgum	80.1	22.2	24.6	24.9	8.4	...
Black and tupelo gums	223.0	47.8	86.0	80.5	8.5	.2
Other hardwoods	208.9	40.1	74.8	87.4	6.2	.4
Total	791.4	155.9	239.6	338.7	52.7	4.5
All species	1,937.7	327.0	753.4	679.5	152.4	25.4
DELTA						
Softwood:						
Loblolly pine	7.0	4.9	...	1.7	0.4	...
Shortleaf pine	23.9	.8	13.7	8.2	1.2	...
Longleaf pine	...	...	...	...	...	...
Slash pine	...	...	...	...	...	...
Other pines	...	...	...	...	...	...
Other softwoods	31.7	17.6	4.6	5.3	1.9	2.3
Total	62.6	23.3	18.3	15.2	3.5	2.3
Hardwood:						
Red oaks	141.6	52.7	10.3	62.8	15.8	...
White oaks	94.0	41.4	10.3	31.3	10.5	.5
Hickory	83.5	47.1	6.9	19.6	9.7	.2
Sweetgum	128.6	55.7	15.5	42.8	14.6	...
Black and tupelo gums	21.2	7.5	7.5	6.2	...	...
Other hardwoods	329.2	181.6	47.6	72.7	26.4	.9
Total	798.1	386.0	98.1	235.4	77.0	1.6
All species	860.7	409.3	116.4	250.6	80.5	3.9

<sup>1</sup> Includes areas not classified elsewhere.



Table 18. Average volume per acre of growing stock by forest type and Survey region, 1957

Forest type	State of Mississippi	North	Central	Southwest	South	Delta
Cubic feet						
Softwood types:						
Longleaf-slash pine	316	...	238	588	314	...
Loblolly-shortleaf pine	544	338	580	657	581	384
Oak-pine	351	256	391	387	397	402
Average	438	300	512	569	401	392
Hardwood types:						
Oak-hickory	355	311	407	420	257	456
Elm-ash-cottonwood	627	544	473	500	654	700
Oak-gum-cypress	531	521	571	623	716	398
Average	446	370	469	498	516	452
All types	441	340	498	536	427	449

Table 19. Average volume per acre of growing stock by stand size and forest type, 1957

Forest type	All stand sizes	Large saw-timber	Small saw-timber	Pole-timber	Seedling and sapling	Nonstocked and other areas <sup>1</sup>
Cubic feet						
Softwood types:						
Longleaf-slash pine	316	779	876	345	78	56
Loblolly-shortleaf pine	544	1,467	1,089	382	101	38
Oak-pine	351	1,013	769	355	137	67
Average	438	1,303	986	366	108	55
Hardwood types:						
Oak-hickory	355	956	763	348	119	22
Elm-ash-cottonwood	627	1,211	1,094	357	122	154
Oak-gum-cypress	531	1,025	991	435	164	71
Average	446	1,029	893	384	136	46
All types	441	1,136	954	375	119	52

<sup>1</sup> Includes areas not classified elsewhere.

Table 20. Growing stock volume by species and county, 1957

County	All species	Softwood			Hardwood			
		Total	Pine	Other softwoods	Total	Soft hardwoods <sub>1</sub>	Oaks	Other hard hardwoods <sub>2</sub>
— — — — — Million cubic feet — — — — —								
Adams	116.6	29.4	29.4	...	87.2	34.6	26.6	26.0
Alcorn	42.1	9.6	9.0	.6	32.5	9.3	16.2	7.0
Amite	129.8	85.7	85.5	.2	44.1	11.3	27.6	5.2
Attala	68.8	22.1	21.0	1.1	46.7	22.6	15.2	8.9
Benton	60.4	21.7	21.6	.1	38.7	11.8	19.0	7.9
Bolivar	60.1	7.7	...	7.7	52.4	33.0	5.3	14.1
Calhoun	76.2	32.9	32.9	...	43.3	13.5	21.9	7.9
Carroll	67.0	4.0	4.0	...	63.0	23.4	27.2	12.4
Chickasaw	32.4	13.5	13.5	...	18.9	3.0	12.4	3.5
Choctaw	59.1	30.6	30.6	...	28.5	12.5	13.3	2.7
Claiborne	129.4	12.8	12.2	.6	116.6	49.8	28.7	38.1
Clarke	188.9	126.6	126.3	.3	62.3	25.7	27.3	9.3
Clay	73.5	4.4	4.1	.3	69.1	9.2	44.8	15.1
Coahoma	50.8	1.3	...	1.3	49.5	14.1	5.5	29.9
Copiah	174.6	94.9	94.5	.4	79.7	33.5	29.0	17.2
Covington	61.2	15.5	15.5	...	45.7	29.0	10.4	6.3
De Soto	43.2	1.6	...	1.6	41.6	15.8	10.9	14.9
Forrest	82.2	58.1	58.1	...	24.1	16.2	6.0	1.9
Franklin	191.8	134.5	134.5	...	57.3	19.7	23.0	14.6



Table 20. Growing stock volume by species and county, 1957 (Continued)

County	All species	Softwood			Hardwood			
		Total	Pine	Other softwoods	Total	Soft hardwoods <sub>1</sub>	Oaks	Other hard hardwoods <sub>2</sub>
— Million cubic feet —								
George	125.3	75.3	71.8	3.5	50.0	31.6	9.7	8.7
Greene	141.0	84.5	83.6	.9	56.5	27.7	24.0	4.8
Grenada	51.2	16.2	15.8	.4	35.0	14.9	10.5	9.6
Hancock	74.4	43.6	43.3	.3	30.8	27.8	3.0	...
Harrison	123.4	96.4	96.4	...	27.0	23.0	1.2	2.8
Hinds	82.6	15.2	14.5	.7	67.4	25.2	25.0	17.2
Holmes	82.1	21.6	20.8	.8	60.5	26.0	24.1	10.4
Humphreys	35.8	...	...	...	35.8	6.1	24.7	5.0
Issaquena	84.0	3.1	...	3.1	80.9	15.1	24.1	41.7
Itawamba	76.8	22.0	21.9	.1	54.8	22.8	16.8	15.2
Jackson	159.9	90.3	86.3	4.0	69.6	55.5	9.8	4.3
Jasper	191.2	113.7	111.9	1.8	77.5	41.0	19.8	16.7
Jefferson	165.9	101.3	63.4	37.9	64.6	28.7	16.8	19.1
Jefferson Davis	62.4	23.6	23.6	...	38.8	21.5	10.8	6.5
Jones	115.4	64.2	64.2	...	51.2	22.0	22.9	6.3
Kemper	143.9	69.3	68.2	1.1	74.6	42.7	20.7	11.2
Lafayette	117.5	38.9	38.8	.1	78.6	21.2	45.1	12.3
Lamar	109.9	76.5	76.5	...	33.4	21.5	9.5	2.4
Lauderdale	163.5	91.7	91.7	...	71.8	26.3	30.1	15.4
Lawrence	96.7	43.6	43.6	...	53.1	14.1	26.2	12.8
Leake	95.5	52.4	52.3	.1	43.1	15.6	24.8	2.7
Lee	14.4	5.2	5.2	...	9.2	1.5	4.9	2.8
Leflore	31.0	...	...	...	31.0	9.3	10.6	11.1
Lincoln	112.1	54.2	53.8	.4	57.9	22.0	23.0	12.9
Lowndes	52.3	11.1	6.2	4.9	41.2	15.1	14.7	11.4
Madison	75.5	23.9	22.5	1.4	51.6	16.4	20.9	14.3
Marion	128.2	59.6	59.6	...	68.6	25.2	29.6	13.8
Marshall	73.5	12.8	11.3	1.5	60.7	29.2	23.6	7.9
Monroe	79.7	20.8	20.8	...	58.9	21.3	26.9	10.7
Montgomery	36.9	14.5	14.5	...	22.4	6.0	12.1	4.3
Neshoba	135.4	56.2	56.2	...	79.2	40.6	30.0	8.6
Newton	89.8	37.2	37.2	...	52.6	16.4	26.3	9.9
Noxubee	102.8	52.6	52.3	.3	50.2	9.3	29.1	11.8
Oktibbeha	58.0	25.7	24.1	1.6	32.3	3.1	23.8	5.4
Panola	33.7	.7	...	.7	33.0	14.0	11.5	7.5
Pearl River	156.2	91.0	91.0	...	65.2	53.6	9.7	1.9
Perry	152.4	113.4	112.9	.5	39.0	22.5	14.5	2.0
Pike	77.7	25.0	25.0	...	52.7	20.5	23.9	8.3
Pontotoc	38.7	14.2	14.2	...	24.5	4.5	10.0	10.0
Prentiss	31.8	8.0	7.9	.1	23.8	6.9	13.4	3.5
Quitman	24.6	1.8	...	1.8	22.8	11.2	5.0	6.6
Rankin	188.0	81.7	78.9	2.8	106.3	27.0	57.3	22.0
Scott	140.3	100.7	100.7	...	39.6	14.7	17.6	7.3
Sharkey	49.0	2.5	...	2.5	46.5	9.9	23.7	12.9
Simpson	94.7	41.3	41.3	...	53.4	19.3	23.3	10.8
Smith	132.0	81.8	81.8	...	50.2	24.4	20.7	5.1
Stone	100.7	61.6	60.3	1.3	39.1	28.7	9.9	.5
Sunflower	8.6	2.6	...	2.6	6.0	.6	4.7	.7
Tallahatchie	46.6	8.5	4.7	3.8	38.1	11.5	18.0	8.6
Tate	33.4	.1	...	.1	33.3	14.7	4.7	13.9
Tippah	51.3	14.7	14.7	...	36.6	9.8	19.5	7.3
Tishomingo	79.9	39.2	39.2	...	40.7	17.0	17.4	6.3
Tunica	59.5	2.5	...	2.5	57.0	30.6	4.0	22.4
Union	55.7	19.3	19.3	...	36.4	18.4	11.9	6.1
Walthall	48.8	14.6	12.4	2.2	34.2	24.9	7.3	2.0
Warren	153.5	6.3	3.9	2.4	147.2	67.9	38.2	41.1
Washington	55.3	.5	...	.5	54.8	27.4	10.3	17.1
Wayne	199.6	134.5	134.5	...	65.1	24.3	31.4	9.4
Webster	42.4	18.8	18.8	...	23.6	5.7	13.1	4.8
Wilkinson	215.5	124.7	116.1	8.6	90.8	27.9	25.3	37.6
Winston	154.2	62.8	62.8	...	91.4	33.2	43.5	14.7
Yalobusha	49.0	12.2	11.7	.5	36.8	9.2	23.1	4.5
Yazoo	119.8	4.2	1.5	2.7	115.6	38.6	37.4	39.6
Total	7,589.0	3,313.3	3,198.6	114.7	4,275.7	1,752.6	1,595.7	927.4

<sup>1</sup> Includes cottonwood, sweetgum, yellow-poplar, and the like.<sup>2</sup> Includes ash, hickory, sycamore, and the like.



Table 21. Sawtimber volume by species and county, 1957

County	All species	Softwood			Hardwood			
		Total	Pine	Other softwoods	Total	Soft hardwoods <sub>1</sub>	Oaks	Other hard hardwoods <sub>2</sub>
— — — — — Million board feet — — — — —								
Adams	493.2	155.2	155.2	..	338.0	141.7	106.6	89.7
Alcorn	102.5	21.1	17.2	3.9	81.4	31.0	36.1	14.3
Amite	501.8	394.6	394.6	..	107.2	23.0	70.9	13.3
Attala	160.3	50.9	45.2	5.7	109.4	43.7	44.5	21.2
Benton	147.3	78.0	78.0	..	69.3	24.6	38.9	5.8
Bolivar	240.7	39.7	...	39.7	201.0	143.3	17.4	40.3
Calhoun	234.6	92.1	92.1	...	142.5	48.7	71.7	22.1
Carroll	176.8	7.5	7.5	...	169.3	44.7	84.0	40.6
Chickasaw	72.1	44.3	44.3	...	27.8	2.9	19.8	5.1
Choctaw	140.7	91.7	91.7	...	49.0	28.1	18.0	2.9
Claiborne	501.8	56.6	53.8	2.8	445.2	220.3	111.6	113.3
Clarke	735.9	597.5	596.0	1.5	138.4	65.5	46.0	26.9
Clay	192.5	19.6	18.0	1.6	172.9	15.7	116.9	40.3
Coahoma	173.6	6.5	...	6.5	167.1	49.0	13.9	104.2
Copiah	701.7	480.2	479.4	.8	221.5	86.7	92.8	42.0
Covington	201.3	63.7	63.7	...	137.6	85.5	28.8	23.3
De Soto	130.3	5.6	...	5.6	124.7	41.8	36.1	46.8
Forrest	280.2	221.1	221.1	...	59.1	37.4	18.6	3.1
Franklin	768.7	606.4	606.4	...	162.3	45.9	67.4	49.0
George	430.2	299.2	281.4	17.8	131.0	87.9	18.4	24.7
Greene	545.7	377.1	372.5	4.6	168.6	89.3	65.6	13.7
Grenada	154.2	51.3	51.3	...	102.9	52.0	28.2	22.7
Hancock	220.8	166.4	166.4	...	54.4	49.6	4.8	...
Harrison	422.1	352.5	352.5	...	69.6	63.8	2.9	2.9
Hinds	258.3	63.4	61.4	2.0	194.9	78.0	78.3	38.6
Holmes	275.6	78.2	75.5	2.7	197.4	90.1	78.6	28.7
Humphreys	110.6	...	...	...	110.6	16.2	76.6	17.8
Issaquena	308.5	16.2	...	16.2	292.3	69.5	82.1	140.7
Itawamba	192.3	40.3	39.9	.4	152.0	77.6	31.3	43.1
Jackson	623.5	349.8	325.7	24.1	273.7	218.8	40.3	14.6
Jasper	755.5	512.2	501.9	10.3	243.3	147.0	48.3	48.0
Jefferson	717.7	521.2	310.6	210.6	196.5	102.0	41.3	53.2
Jefferson Davis	177.3	79.3	79.3	...	98.0	48.4	26.5	23.1
Jones	367.2	260.6	260.6	...	106.6	33.6	52.9	20.1
Kemper	380.2	255.6	255.6	...	124.6	58.7	38.7	27.2
Lafayette	430.5	162.8	162.8	...	267.7	61.7	160.1	45.9
Lamar	388.8	318.4	318.4	...	70.4	52.4	11.3	6.7
Lauderdale	454.2	323.7	323.7	...	130.5	49.0	49.1	32.4
Lawrence	295.9	144.4	144.4	...	151.5	34.8	61.4	55.3
Leake	234.8	155.3	155.3	...	79.5	33.6	40.3	5.6
Lee	51.5	24.3	24.3	...	27.2	3.0	16.9	7.3
Leflore	80.0	...	...	...	80.0	21.3	27.5	31.2
Lincoln	418.5	245.8	244.3	1.5	172.7	70.0	58.9	43.8
Lowndes	128.5	47.6	24.7	22.9	80.9	31.4	25.0	24.5



Table 21. Sawtimber volume by species and county, 1957 (Continued)

County	All species	Softwood			Hardwood			
		Total	Pine	Other softwoods	Total	Soft hardwoods <sub>1</sub>	Oaks	Other hard hardwoods <sub>2</sub>
— — — — — Million board feet — — — — —								
Madison	268.5	112.9	107.1	5.8	155.6	51.7	69.8	34.1
Marion	474.7	271.2	271.2	...	203.5	86.7	78.9	37.9
Marshall	257.2	49.1	43.8	5.3	208.1	88.2	98.4	21.5
Monroe	185.8	85.3	85.3	...	100.5	29.1	48.5	22.9
Montgomery	96.4	48.5	48.5	...	47.9	4.1	29.1	14.7
Neshoba	471.2	220.2	220.2	...	251.0	120.5	103.3	27.2
Newton	245.7	100.2	100.2	...	145.5	44.4	69.7	31.4
Noxubee	342.7	233.0	231.5	1.5	109.7	9.3	69.2	31.2
Oktibbeha	162.0	117.0	111.8	5.2	45.0	2.5	34.1	8.4
Panola	89.5	1.0	...	1.0	88.5	31.9	36.4	20.2
Pearl River	556.2	412.6	412.6	...	143.6	117.9	20.6	5.1
Perry	565.6	482.7	479.9	2.8	82.9	43.3	32.6	7.0
Pike	242.6	86.4	86.4	...	156.2	56.2	69.4	30.6
Pontotoc	101.3	53.8	53.8	...	47.5	6.9	20.8	19.8
Prentiss	53.6	11.7	11.7	...	41.9	10.4	26.6	4.9
Quitman	77.4	11.5	...	11.5	65.9	36.2	10.4	19.3
Rankin	597.7	314.2	297.1	17.1	283.5	51.1	160.2	72.2
Scott	471.4	369.8	369.8	...	101.6	49.2	38.1	14.3
Sharkey	167.8	11.7	...	11.7	156.1	33.9	86.1	36.1
Simpson	312.1	182.5	182.5	...	129.6	51.0	59.7	18.9
Smith	347.7	270.4	270.4	...	77.3	33.9	34.1	9.3
Stone	360.6	265.9	261.3	4.6	94.7	71.7	22.1	.9
Sunflower	26.1	15.1	...	15.1	11.0	2.2	8.8	...
Tallahatchie	145.7	28.7	18.3	10.4	117.0	38.1	49.6	29.3
Tate	80.3	...	...	...	80.3	48.4	4.7	27.2
Tippah	105.9	27.4	27.4	...	78.5	23.6	42.1	12.8
Tishomingo	263.1	138.5	138.5	...	124.6	54.8	52.4	17.4
Tunica	252.5	14.3	...	14.3	238.2	145.4	7.2	85.6
Union	145.4	57.3	57.3	...	88.1	42.0	33.7	12.4
Walthall	156.3	72.1	58.2	13.9	84.2	68.7	11.4	4.1
Warren	597.3	30.7	24.4	6.3	566.6	286.6	136.3	143.7
Washington	206.8	2.5	...	2.5	204.3	109.5	38.4	56.4
Wayne	732.5	598.2	598.2	...	134.3	59.5	53.5	21.3
Webster	99.3	63.1	63.1	...	36.2	8.8	25.2	2.2
Wilkinson	869.1	588.1	545.2	42.9	281.0	78.5	84.6	117.9
Winston	524.2	261.3	261.3	...	262.9	111.1	119.1	32.7
Yalobusha	107.1	32.9	31.9	1.0	74.2	10.0	54.4	9.8
Yazoo	409.0	17.7	6.7	11.0	391.3	116.3	129.8	145.2
Total	25,546.7	13,537.4	12,972.3	565.1	12,009.3	5,052.8	4,274.6	2,681.9

<sup>1</sup> Includes cottonwood, sweetgum, yellow-poplar, and the like.<sup>2</sup> Includes ash, hickory, sycamore, and the like.



Table 22. Sawtimber volume by species and tree diameter, by Survey region, 1957

Species	All diameter classes	10-12 inches	14-18 inches	20-24 inches	26 inches and up
— Million board feet —					
STATE OF MISSISSIPPI					
Softwood:					
Loblolly pine	6,679.6	2,140.8	3,277.7	1,041.4	219.7
Shortleaf pine	3,280.0	1,828.1	1,307.9	133.7	10.3
Longleaf pine	1,611.4	1,008.5	570.2	32.7	...
Slash pine	962.3	575.4	349.1	37.8	...
Other pines	439.0	122.2	234.8	68.3	13.7
Other softwoods	565.1	81.0	270.5	134.7	78.9
Total	13,537.4	5,756.0	6,010.2	1,448.6	322.6
Hardwood:					
Red oaks	2,544.6	517.4	1,344.2	446.8	236.2
White oaks	1,730.0	386.5	922.7	264.3	156.5
Hickory	1,135.7	201.1	537.1	294.6	102.9
Sweetgum	1,934.8	429.1	1,156.4	278.8	70.5
Black and tupelo gums	1,318.2	396.2	713.7	160.1	48.2
Other hardwoods	3,346.0	575.9	1,709.4	737.2	323.5
Total	12,009.3	2,506.2	6,383.5	2,181.8	937.8
All species	25,546.7	8,262.2	12,393.7	3,630.4	1,260.4
NORTH					
Softwood:					
Loblolly pine	358.3	138.3	156.4	44.6	19.0
Shortleaf pine	966.6	581.0	369.2	16.4	...
Longleaf pine	...	...	...	...	...
Slash pine	...	...	...	...	...
Other pines	...	...	...	...	...
Other softwoods	46.9	10.3	19.3	9.6	7.7
Total	1,371.8	729.6	544.9	70.6	26.7
Hardwood:					
Red oaks	647.6	144.1	354.8	106.2	42.5
White oaks	541.8	149.1	316.1	61.7	14.9
Hickory	242.8	66.5	117.7	51.8	6.8
Sweetgum	448.8	110.0	302.7	33.8	2.3
Black and tupelo gums	163.2	51.6	101.6	10.0	...
Other hardwoods	484.7	103.6	293.1	69.4	18.6
Total	2,528.9	624.9	1,486.0	332.9	85.1
All species	3,900.7	1,354.5	2,030.9	403.5	111.8
CENTRAL					
Softwood:					
Loblolly pine	2,347.4	914.5	1,132.0	275.0	25.9
Shortleaf pine	1,228.0	747.2	459.9	14.8	6.1
Longleaf pine	56.5	27.4	25.6	3.5	...
Slash pine	...	...	...	...	...
Other pines	178.8	61.9	65.5	37.7	13.7
Other softwoods	36.1	3.0	18.9	14.2	...
Total	3,846.8	1,754.0	1,701.9	345.2	45.7
Hardwood:					
Red oaks	484.2	128.4	246.8	69.7	39.3
White oaks	436.1	125.2	243.7	54.5	12.7
Hickory	221.6	45.8	123.6	50.0	2.2
Sweetgum	432.7	148.2	217.6	52.3	14.6
Black and tupelo gums	295.5	113.0	134.2	21.1	27.2
Other hardwoods	316.7	79.6	179.2	49.6	8.3
Total	2,186.8	640.2	1,145.1	297.2	104.3
All species	6,033.6	2,394.2	2,847.0	642.4	150.0



Table 22. Sawtimber volume by species and tree diameter, by Survey region, 1957  
(Continued)

Species	All diameter classes	10-12 inches <sup>1</sup>	14-18 inches	20-24 inches	26 inches and up
— Million board feet —					
SOUTHWEST					
Softwood:					
Loblolly pine	2,270.2	541.4	1,129.7	508.7	90.4
Shortleaf pine	604.8	226.5	293.5	80.6	4.2
Longleaf pine	118.2	68.7	38.6	10.9	...
Slash pine	...	...	...	...	...
Other pines	51.2	11.9	29.1	10.2	...
Other softwoods	266.4	29.5	148.4	65.1	23.4
Total	3,310.8	878.0	1,639.3	675.5	118.0
Hardwood:					
Red oaks	584.7	108.1	298.0	108.7	69.9
White oaks	266.9	33.5	152.3	61.3	19.8
Hickory	213.8	26.8	101.2	57.2	28.6
Sweetgum	421.3	80.6	276.9	52.0	11.8
Black and tupelo gums	175.3	39.3	97.2	33.8	5.0
Other hardwoods	769.1	130.4	369.0	183.1	86.6
Total	2,431.1	418.7	1,294.6	496.1	221.7
All species	5,741.9	1,296.7	2,933.9	1,171.6	339.7
SOUTH					
Softwood:					
Loblolly pine	1,667.2	541.6	855.2	198.5	71.9
Shortleaf pine	392.2	218.5	152.9	20.8	...
Longleaf pine	1,436.7	912.4	506.0	18.3	...
Slash pine	962.3	575.4	349.1	37.8	...
Other pines	209.0	48.4	140.2	20.4	...
Other softwoods	67.8	12.2	35.0	12.8	7.8
Total	4,735.2	2,308.5	2,038.4	308.6	79.7
Hardwood:					
Red oaks	384.6	84.4	217.7	56.9	25.6
White oaks	166.0	43.7	86.0	23.2	13.1
Hickory	155.1	29.5	80.4	37.3	7.9
Sweetgum	201.6	49.0	122.2	30.4	...
Black and tupelo gums	612.7	180.5	333.5	82.7	16.0
Other hardwoods	543.7	136.2	338.5	53.0	16.0
Total	2,063.7	523.3	1,178.3	283.5	78.6
All species	6,798.9	2,831.8	3,216.7	592.1	158.3
DELTA					
Softwood:					
Loblolly pine	36.5	5.0	4.4	14.6	12.5
Shortleaf pine	88.4	54.9	32.4	1.1	...
Longleaf pine	...	...	...	...	...
Slash pine	...	...	...	...	...
Other pines	...	...	...	...	...
Other softwoods	147.9	26.0	48.9	33.0	40.0
Total	272.8	85.9	85.7	48.7	52.5
Hardwood:					
Red oaks	443.5	52.4	226.9	105.3	58.9
White oaks	319.2	35.0	124.6	63.6	96.0
Hickory	302.4	32.5	114.2	98.3	57.4
Sweetgum	430.4	41.3	237.0	110.3	41.8
Black and tupelo gums	71.5	11.8	47.2	12.5	...
Other hardwoods	1,231.8	126.1	529.6	382.1	194.0
Total	2,798.8	299.1	1,279.5	772.1	448.1
All species	3,071.6	385.0	1,365.2	820.8	500.6

<sup>1</sup> Hardwood sawtimber volume was not tallied in trees under 11.0 inches d.b.h.



Table 23. Sawtimber volume by species and stand size, by Survey region, 1957

Species	All stand sizes	Large saw-timber	Small saw-timber	Pole-timber	Seedling and sapling	Nonstocked and other areas
— — — — — Million board feet — — — — —						
STATE OF MISSISSIPPI						
Softwood:						
Loblolly pine	6,679.6	2,637.2	2,703.7	1,071.7	259.1	7.9
Shortleaf pine	3,280.0	507.6	1,934.8	656.5	181.1	...
Longleaf pine	1,611.4	116.6	822.9	458.7	145.4	67.8
Slash pine	962.3	72.5	578.5	217.2	80.1	14.0
Other pines	439.0	198.0	168.1	53.7	19.2	...
Other softwoods	565.1	399.0	74.9	53.2	24.8	13.2
Total	13,537.4	3,930.9	6,282.9	2,511.0	709.7	102.9
Hardwood:						
Red oaks	2,544.6	780.4	569.5	944.1	240.1	10.5
White oaks	1,730.0	473.2	514.1	553.1	183.5	6.1
Hickory	1,135.7	382.8	260.4	384.5	108.0	...
Sweetgum	1,934.8	778.9	547.6	466.4	141.9	...
Black and tupelo gums	1,318.2	463.6	499.6	302.4	50.5	2.1
Other hardwoods	3,346.0	1,613.8	840.1	707.2	182.7	2.2
Total	12,009.3	4,492.7	3,231.3	3,357.7	906.7	20.9
All species	25,546.7	8,423.6	9,514.2	5,868.7	1,616.4	123.8
NORTH						
Softwood:						
Loblolly pine	358.3	148.7	63.3	111.8	33.2	1.3
Shortleaf pine	966.6	56.5	633.5	193.3	83.3	...
Longleaf pine	...	...	...	...	...	...
Slash pine	...	...	...	...	...	...
Other pines	...	...	...	...	...	...
Other softwoods	46.9	21.2	8.2	12.3	5.2	...
Total	1,371.8	226.4	705.0	317.4	121.7	1.3
Hardwood:						
Red oaks	647.6	141.8	178.6	244.7	81.5	1.0
White oaks	541.8	85.7	187.7	189.9	74.7	3.8
Hickory	242.8	17.9	82.1	118.6	24.2	...
Sweetgum	448.8	105.5	194.1	110.5	38.7	...
Black and tupelo gums	163.2	48.5	72.2	29.2	13.3	...
Other hardwoods	484.7	139.4	186.9	106.7	51.7	...
Total	2,528.9	538.8	901.6	799.6	284.1	4.8
All species	3,900.7	765.2	1,606.6	1,117.0	405.8	6.1
CENTRAL						
Softwood:						
Loblolly pine	2,347.4	768.1	1,165.9	367.0	46.4	...
Shortleaf pine	1,228.0	232.6	697.6	244.6	53.2	...
Longleaf pine	56.5	...	27.8	28.7	...	...
Slash pine	...	...	...	...	...	...
Other pines	178.8	79.7	68.6	16.5	14.0	...
Other softwoods	36.1	27.5	...	8.6	...	...
Total	3,846.8	1,107.9	1,959.9	665.4	113.6	...
Hardwood:						
Red oaks	484.2	114.7	164.0	174.9	30.6	...
White oaks	436.1	102.6	176.2	126.1	31.2	...
Hickory	221.6	60.9	62.4	83.4	14.9	...
Sweetgum	432.7	141.5	162.1	112.8	16.3	...
Black and tupelo gums	295.5	95.9	128.2	60.5	10.9	...
Other hardwoods	316.7	148.2	85.5	74.9	6.5	1.6
Total	2,186.8	663.8	778.4	632.6	110.4	1.6
All species	6,033.6	1,771.7	2,738.3	1,298.0	224.0	1.6



Table 23. Sawtimber volume by species and stand size, by Survey region, 1957  
(Continued)

Species	All stand sizes	Large saw-timber	Small saw-timber	Pole-timber	Seedling and sapling	Nonstocked and other areas <sup>1</sup>
— Million board feet —						
SOUTHWEST						
Softwood:						
Loblolly pine	2,270.2	1,038.3	790.7	346.1	95.1	...
Shortleaf pine	604.8	170.4	311.6	104.2	18.6	...
Longleaf pine	118.2	26.8	62.9	14.5	14.0	...
Slash pine	...	...	...	...	...	...
Other pines	51.2	35.5	8.4	7.3	...	...
Other softwoods	266.4	224.1	32.7	7.3	2.3	...
Total	3,310.8	1,495.1	1,206.3	479.4	130.0	...
Hardwood:						
Red oaks	584.7	217.6	125.6	197.2	43.0	1.3
White oaks	266.9	92.6	68.9	80.7	24.7	...
Hickory	213.8	68.8	55.3	72.3	17.4	...
Sweetgum	421.3	232.0	74.6	83.9	30.8	...
Black and tupelo gums	175.3	88.9	31.3	50.0	3.9	1.2
Other hardwoods	769.1	391.8	191.3	159.9	26.1	...
Total	2,431.1	1,091.7	547.0	644.0	145.9	2.5
All species	5,741.9	2,586.8	1,753.3	1,123.4	275.9	2.5
SOUTH						
Softwood:						
Loblolly pine	1,667.2	650.5	683.8	241.9	84.4	6.6
Shortleaf pine	392.2	43.3	229.0	96.0	23.9	...
Longleaf pine	1,436.7	89.8	732.2	415.5	131.4	67.8
Slash pine	962.3	72.5	578.5	217.2	80.1	14.0
Other pines	209.0	82.8	91.1	29.9	5.2	...
Other softwoods	67.8	29.8	16.4	8.4	13.2	...
Total	4,735.2	968.7	2,331.0	1,008.9	338.2	88.4
Hardwood:						
Red oaks	384.6	92.5	72.9	172.4	38.6	8.2
White oaks	166.0	34.4	43.6	68.2	19.8	...
Hickory	155.1	40.3	36.0	62.0	16.8	...
Sweetgum	201.6	76.7	62.2	53.9	8.8	...
Black and tupelo gums	612.7	201.2	243.5	144.7	22.4	.9
Other hardwoods	543.7	143.6	216.7	175.1	8.3	...
Total	2,063.7	588.7	674.9	676.3	114.7	9.1
All species	6,798.9	1,557.4	3,005.9	1,685.2	452.9	97.5
DELTA						
Softwood:						
Loblolly pine	36.5	31.6	...	4.9	...	...
Shortleaf pine	88.4	4.8	63.1	18.4	2.1	...
Longleaf pine	...	...	...	...	...	...
Slash pine	...	...	...	...	...	...
Other pines	...	...	...	...	...	...
Other softwoods	147.9	96.4	17.6	16.6	4.1	13.2
Total	272.8	132.8	80.7	39.9	6.2	13.2
Hardwood:						
Red oaks	443.5	213.8	28.4	154.9	46.4	...
White oaks	319.2	157.9	37.7	88.2	33.1	2.3
Hickory	302.4	194.9	24.6	48.2	34.7	...
Sweetgum	430.4	223.2	54.6	105.3	47.3	...
Black and tupelo gums	71.5	29.1	24.4	18.0	...	...
Other hardwoods	1,231.8	790.8	159.7	190.6	90.1	.6
Total	2,798.8	1,609.7	329.4	605.2	251.6	2.9
All species	3,071.6	1,742.5	410.1	645.1	257.8	16.1

<sup>1</sup> Includes areas not classified elsewhere.



Table 24. Sawtimber volume by species and Survey region, 1957

Species	State of Mississippi	North	Central	Southwest	South	Delta
— — — — Million board feet — — — —						
<b>Softwood:</b>						
Loblolly pine	6,679.6	358.3	2,347.4	2,270.2	1,667.2	36.5
Shortleaf pine	3,280.0	966.6	1,228.0	604.8	392.2	88.4
Longleaf pine	1,611.4	...	56.5	118.2	1,436.7	...
Slash pine	962.3	...	...	...	962.3	...
Other pines	439.0	...	178.8	51.2	209.0	...
Other softwoods	565.1	46.9	36.1	266.4	67.8	147.9
<b>Total</b>	<b>13,537.4</b>	<b>1,371.8</b>	<b>3,846.8</b>	<b>3,310.8</b>	<b>4,735.2</b>	<b>272.8</b>
<b>Hardwood:</b>						
Black, scarlet, and southern red oaks	999.8	390.0	186.9	203.9	160.9	58.1
Cherrybark, Shumard, and northern red oaks	376.9	107.7	58.5	138.8	15.4	56.5
Water oaks	1,167.9	149.9	238.8	242.0	208.3	328.9
White oak ( <i>Quercus alba</i> )	877.4	328.4	242.4	162.1	91.7	52.8
Other white oaks	852.6	213.4	193.7	104.8	74.3	266.4
Pecan	354.7	16.5	5.2	71.6	1.9	259.5
Other hickories	781.0	226.3	216.4	142.2	153.2	42.9
Sweetgum	1,934.8	448.8	432.7	421.3	201.6	430.4
Black & tupelo gums	1,318.2	163.2	295.5	175.3	612.7	71.5
Cottonwood	453.5	25.4	2.3	113.7	15.0	297.1
Willow	318.5	49.9	...	44.4	3.6	220.6
Soft maples	89.5	23.8	16.3	4.1	28.5	16.8
Yellow-poplar	498.9	86.1	107.4	137.4	99.6	68.4
Sweetbay and magnolia	327.6	12.8	7.0	20.1	279.9	7.8
White elm	258.9	40.8	20.6	53.5	3.3	140.7
Other elms	228.1	53.1	31.3	39.5	10.8	93.4
Ash	271.8	61.9	32.1	49.2	34.0	94.6
Hackberry	161.7	26.0	20.2	27.3	8.9	79.3
Beech	241.5	25.8	54.8	119.4	27.4	14.1
Sycamore	240.5	55.4	6.5	54.5	1.8	122.3
Other hardwoods	255.5	23.7	18.2	106.0	30.9	76.7
<b>Total</b>	<b>12,009.3</b>	<b>2,528.9</b>	<b>2,186.8</b>	<b>2,431.1</b>	<b>2,063.7</b>	<b>2,798.8</b>
<b>All species</b>	<b>25,546.7</b>	<b>3,900.7</b>	<b>6,033.6</b>	<b>5,741.9</b>	<b>6,798.9</b>	<b>3,071.6</b>

Table 25. Average sawtimber volume per acre by forest type and Survey region, 1957

Forest type	State of Mississippi	North	Central	Southwest	South	Delta
— — — — Board feet — — — —						
<b>Softwood types:</b>						
Longleaf-slash pine	1,172	...	992	3,027	1,148	...
Loblolly-shortleaf pine	2,094	1,151	2,065	2,847	2,363	1,489
Oak-pine	1,079	627	1,204	1,389	1,293	1,230
<b>Average</b>	<b>1,597</b>	<b>907</b>	<b>1,764</b>	<b>2,386</b>	<b>1,506</b>	<b>1,371</b>
<b>Hardwood types:</b>						
Oak-hickory	990	748	1,028	1,412	678	1,647
Elm-ash-cottonwood	2,421	1,412	1,778	2,128	2,198	2,958
Oak-gum-cypress	1,645	1,462	1,588	2,255	2,081	1,316
<b>Average</b>	<b>1,353</b>	<b>943</b>	<b>1,242</b>	<b>1,756</b>	<b>1,480</b>	<b>1,616</b>
<b>All types</b>	<b>1,486</b>	<b>928</b>	<b>1,591</b>	<b>2,090</b>	<b>1,500</b>	<b>1,602</b>



Table 26. Average sawtimber volume per acre by stand size and forest type, 1957

Forest type	All stand sizes	Large saw-timber	Small saw-timber	Pole-timber	Seedling and sapling	Nonstocked and other areas <sup>1</sup>
— — — — — Board feet — — — — —						
Softwood types:						
Longleaf-slash pine	1,172	4,193	3,727	918	280	217
Loblolly-shortleaf pine	2,094	7,414	4,690	840	232	127
Oak-pine	1,079	4,393	2,935	836	359	209
Average	1,597	6,425	4,170	853	283	206
Hardwood types:						
Oak-hickory	990	4,005	2,549	706	274	79
Elm-ash-cottonwood	2,421	5,672	3,957	800	436	90
Oak-gum-cypress	1,645	4,263	3,265	934	426	369
Average	1,353	4,374	2,979	803	338	152
All types	1,486	5,176	3,760	827	306	190

<sup>1</sup> Includes areas not classified elsewhere.

Table 27. Softwood sawtimber volume by log grade and stand quality, by species group, and by Survey region, 1957

Species group and Survey region	All grades	Grade 1	Grade 2	Grade 3			Grade 4		
				Total	In fair and better stands	In poor stands	Total	In fair and better stands	In poor stands
— — — — — Million board feet — — — — —									
Species group:									
Loblolly pine	6,679.6	155.1	867.3	2,399.8	888.6	1,511.2	3,257.4	1,153.9	2,103.5
Shortleaf pine	3,280.0	30.8	368.6	1,318.5	477.1	841.4	1,562.1	457.6	1,104.5
Longleaf pine	1,611.4	1.8	128.8	467.3	45.2	422.1	1,013.5	99.4	914.1
Slash pine	962.3	8.9	132.8	518.6	112.2	406.4	302.0	66.4	235.6
Other pines	439.0	4.0	27.6	194.2	80.3	113.9	213.2	82.5	130.7
Other softwoods	565.1	66.6	75.6	152.2	111.2	41.0	270.7	186.9	83.8
Total	13,537.4	267.2	1,600.7	5,050.6	1,714.6	3,336.0	6,618.9	2,046.7	4,572.2
Survey region:									
North	1,371.8	26.9	153.7	498.4	148.9	349.5	692.8	194.5	498.3
Central	3,846.8	44.9	409.2	1,536.3	515.0	1,021.3	1,856.4	582.7	1,273.7
Southwest	3,310.8	122.4	465.6	1,181.6	557.4	624.2	1,541.2	759.8	781.4
South	4,735.2	54.5	548.8	1,789.9	478.2	1,311.7	2,342.0	462.2	1,879.8
Delta	272.8	18.5	23.4	44.4	15.1	29.3	186.5	47.5	139.0
Total	13,537.4	267.2	1,600.7	5,050.6	1,714.6	3,336.0	6,618.9	2,046.7	4,572.2

Table 28. Hardwood sawtimber volume by log class and stand quality, by species group, and by Survey region, 1957

Species group and Survey region	All classes	Standard lumber logs					Tie and timber logs		
		Grade 1	Grade 2	Grade 3			Total	In fair and better stands	In poor stands
				Total	In fair and better stands	In poor stands			
— — — — — Million board feet — — — — —									
Species group:									
Red oaks	2,544.6	77.7	311.9	1,175.4	265.4	910.0	979.6	191.0	788.6
White oaks	1,730.0	54.2	271.2	941.4	213.3	728.1	463.2	91.7	371.5
Hickory	1,135.7	88.4	190.8	598.4	125.7	472.7	258.1	53.9	204.2
Sweetgum	1,934.8	100.9	341.2	1,017.4	426.8	590.6	475.3	145.8	329.5
Black and tupelo gums	1,318.2	75.9	270.3	756.3	341.8	414.5	215.7	61.5	154.2
Other hardwoods	3,346.0	252.2	698.2	1,628.1	784.7	843.4	767.5	249.0	518.5
Total	12,009.3	649.3	2,083.6	6,117.0	2,157.7	3,959.3	3,159.4	792.9	2,366.5
Survey region:									
North	2,528.9	81.5	377.6	1,411.1	405.1	1,006.0	658.7	130.0	528.7
Central	2,186.8	60.8	242.8	1,055.4	297.2	758.2	827.8	157.6	670.2
Southwest	2,431.1	97.7	457.1	1,311.7	507.1	804.6	564.6	182.9	381.7
South	2,063.7	115.5	292.7	1,047.3	387.1	660.2	608.2	179.5	428.7
Delta	2,798.8	293.8	713.4	1,291.5	561.2	730.3	500.1	142.9	357.2
Total	12,009.3	649.3	2,083.6	6,117.0	2,157.7	3,959.3	3,159.4	792.9	2,366.5



Table 29. Annual cut of growing stock and sawtimber by species group and county, 1956

County	Growing stock			Sawtimber		
	All species	Softwood	Hardwood	All species	Softwood	Hardwood
	— Million cubic feet —			— Million board feet —		
Adams	7.6	2.0	5.6	31.4	9.6	21.8
Alcorn	2.7	0.8	1.9	10.5	3.2	7.3
Amite	9.5	5.6	3.9	39.2	25.0	14.2
Attala	7.2	3.0	4.2	23.4	10.7	12.7
Benton	1.5	0.6	0.9	5.9	2.6	3.3
Bolivar	5.4	0.1	5.3	19.6	0.5	19.1
Calhoun	3.3	0.9	2.4	13.9	4.3	9.6
Carroll	4.7	1.3	3.4	18.7	6.0	12.7
Chickasaw	3.2	0.8	2.4	11.5	2.8	8.7
Choctaw	4.6	1.7	2.9	16.0	5.6	10.4
Claiborne	6.4	1.6	4.8	23.8	6.1	17.7
Clarke	15.4	8.8	6.6	56.5	31.8	24.7
Clay	2.3	0.4	1.9	9.8	1.7	8.1
Coahoma	3.6	0.2	3.4	14.8	0.8	14.0
Copiah	12.7	5.3	7.4	43.0	17.2	25.8
Covington	4.8	2.3	2.5	13.9	5.8	8.1
De Soto	2.0	0.1	1.9	6.7	0.5	6.2
Forrest	7.6	4.7	2.9	25.8	15.6	10.2
Franklin	10.2	5.9	4.3	35.1	21.7	13.4
George	5.0	2.9	2.1	19.7	10.5	9.2
Greene	6.4	4.3	2.1	22.2	14.4	7.8
Grenada	3.7	1.6	2.1	16.1	7.8	8.3
Hancock	4.6	4.1	0.5	13.6	11.5	2.1
Harrison	5.3	4.3	1.0	16.8	13.2	3.6
Hinds	8.1	2.1	6.0	27.4	6.5	20.9
Holmes	7.9	1.8	6.1	28.0	6.6	21.4
Humphreys	3.1	0.1	3.0	12.1	0.6	11.5
Issaquena	5.9	0.2	5.7	26.1	1.3	24.8
Itawamba	2.7	1.2	1.5	12.0	6.1	5.9
Jackson	6.3	4.4	1.9	20.8	12.7	8.1
Jasper	11.6	6.0	5.6	34.0	17.2	16.8
Jefferson	7.5	2.7	4.8	28.3	10.8	17.5
Jefferson Davis	3.7	2.0	1.7	12.1	6.2	5.9
Jones	9.1	3.6	5.5	27.4	12.0	15.4
Kemper	9.0	5.7	3.3	36.6	24.1	12.5
Lafayette	4.2	1.5	2.7	16.0	6.3	9.7
Lamar	6.4	3.9	2.5	24.9	15.1	9.8
Lauderdale	11.0	6.9	4.1	39.0	24.2	14.8
Lawrence	7.4	3.5	3.9	20.5	7.6	12.9
Leake	4.9	2.3	2.6	14.7	6.8	7.9
Lee	1.4	0.2	1.2	4.6	0.7	3.9
Leflore	4.6	0.3	4.3	18.2	1.4	16.8
Lincoln	9.4	5.0	4.4	31.7	18.1	13.6
Lowndes	4.3	1.1	3.2	17.7	4.3	13.4



Table 29. Annual cut of growing stock and sawtimber by species group and county, 1956 (Continued)

County	Growing stock			Sawtimber		
	All species	Softwood	Hardwood	All species	Softwood	Hardwood
	— Million cubic feet —			— Million board feet —		
Madison	4.4	0.9	3.5	15.7	2.1	13.6
Marion	7.6	3.2	4.4	23.8	9.2	14.6
Marshall	2.9	0.7	2.2	11.5	3.3	8.2
Monroe	5.8	3.0	2.8	25.8	15.0	10.8
Montgomery	4.6	2.4	2.2	19.7	11.6	8.1
Neshoba	5.7	2.7	3.0	20.7	9.7	11.0
Newton	7.2	3.6	3.6	22.6	10.2	12.4
Noxubee	4.8	2.4	2.4	18.8	9.2	9.6
Oktibbeha	3.1	1.2	1.9	11.0	4.6	6.4
Panola	3.6	0.1	3.5	13.6	0.5	13.1
Pearl River	7.6	4.0	3.6	26.1	12.7	13.4
Perry	6.0	3.6	2.4	20.1	13.1	7.0
Pike	8.0	4.0	4.0	25.1	11.6	13.5
Pontotoc	2.9	1.2	1.7	9.4	3.3	6.1
Prentiss	1.8	0.7	1.1	6.4	2.7	3.7
Quitman	2.9	0.1	2.8	11.6	0.6	11.0
Rankin	10.4	4.6	5.8	37.5	16.6	20.9
Scott	11.8	6.0	5.8	39.7	19.7	20.0
Sharkey	3.5	0.1	3.4	12.9	0.5	12.4
Simpson	6.3	2.9	3.4	19.3	8.3	11.0
Smith	6.6	3.5	3.1	24.5	14.2	10.3
Stone	6.4	4.2	2.2	26.0	17.1	8.9
Sunflower	2.9	0.1	2.8	10.2	0.3	9.9
Tallahatchie	3.2	0.2	3.0	12.4	1.1	11.3
Tate	1.7	0.1	1.6	6.4	0.3	6.1
Tippah	3.0	1.2	1.8	12.6	5.6	7.0
Tishomingo	6.8	4.1	2.7	29.5	19.1	10.4
Tunica	2.8	0.1	2.7	11.5	0.3	11.2
Union	2.4	0.7	1.7	9.0	2.8	6.2
Walthall	3.8	1.6	2.2	11.3	3.5	7.8
Warren	10.6	0.4	10.2	45.4	1.9	43.5
Washington	4.6	0.4	4.2	17.7	1.8	15.9
Wayne	9.8	4.5	5.3	36.7	16.5	20.2
Webster	3.6	1.0	2.6	13.9	4.2	9.7
Wilkinson	14.8	6.6	8.2	65.1	32.3	32.8
Winston	6.7	3.4	3.3	24.4	11.9	12.5
Yalobusha	3.0	0.8	2.2	10.6	3.0	7.6
Yazoo	5.6	0.3	5.3	23.5	1.1	22.4
All counties	477.4	198.4	279.0	1,742.0	719.0	1,023.0



Table 30. Annual cut of sawtimber and growing stock, by species group and class of timber, by Survey region, 1956

Class of timber	Growing stock			Sawtimber		
	All species	Softwood	Hardwood	All species	Softwood	Hardwood
Million cubic feet			Million board feet			
STATE OF MISSISSIPPI						
Sawtimber trees	356.1	137.3	218.8	1,742.0	719.0	1,023.0
Poletimber trees	121.3	61.1	60.2	...	...	...
Total	477.4	198.4	279.0	1,742.0	719.0	1,023.0
NORTH						
Sawtimber trees	69.5	23.5	46.0	338.6	127.6	211.0
Poletimber trees	16.3	5.8	10.5	...	...	...
Total	85.8	29.3	56.5	338.6	127.6	211.0
CENTRAL						
Sawtimber trees	84.1	41.2	42.9	412.0	214.8	197.2
Poletimber trees	34.5	20.6	13.9	...	..	...
Total	118.6	61.8	56.8	412.0	214.8	197.2
SOUTHWEST						
Sawtimber trees	73.8	30.4	43.4	365.7	160.9	204.8
Poletimber trees	24.9	11.5	13.4	...	...	...
Total	98.7	41.9	56.8	365.7	160.9	204.8
SOUTH						
Sawtimber trees	73.5	38.7	34.8	361.7	196.7	165.0
Poletimber trees	34.2	22.2	12.0	...	...	...
Total	107.7	60.9	46.8	361.7	196.7	165.0
DELTA						
Sawtimber trees	55.2	3.5	51.7	264.0	19.0	245.0
Poletimber trees	11.4	1.0	10.4	...	...	...
Total	66.6	4.5	62.1	264.0	19.0	245.0

Table 31. Annual cut of sawtimber and growing stock by species, 1956

Species	Growing stock	Sawtimber
	Million cubic feet	Million board feet
Softwood:		
Pines	193.2	695.2
Other softwoods	5.2	23.8
Total	198.4	719.0
Hardwood:		
Red oaks	71.8	266.6
White oaks	33.2	127.9
Hickory	11.8	41.4
Other hard hardwoods	27.6	109.9
Black and tupelo gums	27.3	105.1
Sweetgum	75.0	239.3
Other soft hardwoods	32.3	132.8
Total	279.0	1,023.0
All species	477.4	1,742.0



Table 32. Net annual growth per acre of sawtimber and growing stock, by forest-type group and Survey region, 1956

Survey region	Growing stock			Sawtimber		
	All types	Softwood types	Hardwood types	All types	Softwood types	Hardwood types
	— — Cubic feet — —			— — Board feet — —		
North	26	28	25	77	91	67
Central	44	49	34	153	183	94
Southwest	41	48	33	165	199	127
South	35	37	28	135	149	89
Delta	28	29	28	86	83	86
Average	35	40	29	124	154	88

Table 33. Net annual growth of sawtimber and growing stock by species and class of timber, by Survey region, 1956

Class of timber	Growing stock			Sawtimber		
	All species	Softwood	Hardwood	All species	Softwood	Hardwood
Million cubic feet			Million board feet			
STATE OF MISSISSIPPI						
Sawtimber trees	390.7	240.7	150.0	2,135.5	1,371.5	764.0
Poletimber trees	211.7	92.7	119.0	...	...	...
Total	602.4	333.4	269.0	2,135.5	1,371.5	764.0
NORTH						
Sawtimber trees	63.9	27.4	36.5	325.4	152.2	173.2
Poletimber trees	47.1	16.2	30.9	...	...	...
Total	111.0	43.6	67.4	325.4	152.2	173.2
CENTRAL						
Sawtimber trees	106.6	76.3	30.3	581.7	434.6	147.1
Poletimber trees	61.0	31.0	30.0	...	...	...
Total	167.6	107.3	60.3	581.7	434.6	147.1
SOUTHWEST						
Sawtimber trees	73.4	44.7	28.7	453.4	279.5	173.9
Poletimber trees	40.0	17.9	22.1	...	...	...
Total	113.4	62.6	50.8	453.4	279.5	173.9
SOUTH						
Sawtimber trees	114.1	89.2	24.9	610.9	492.5	118.4
Poletimber trees	43.0	26.9	16.1	...	...	...
Total	157.1	116.1	41.0	610.9	492.5	118.4
DELTA						
Sawtimber trees	32.7	3.1	29.6	164.1	12.7	151.4
Poletimber trees	20.6	.7	19.9	...	...	...
Total	53.3	3.8	49.5	164.1	12.7	151.4



Table 34. Number of growing stock trees by species group and Survey region (1957) and change since 1948

Diameter class (inches)	Softwood		Hardwood		Softwood		Hardwood	
	Thousand trees	Percent change	Thousand trees	Percent change	Thousand trees	Percent change	Thousand trees	Percent change
STATE OF MISSISSIPPI					SOUTHWEST			
2-4	1,835,767	+ 75	3,582,084	+ 32	351,192	+ 46	666,144	+ 18
6-8	353,911	+ 25	449,501	+ 9	60,747	+ 22	73,954	+ 13
10-12	103,331	+ 10	158,049	+ 3	17,114	+ 1	25,549	- 6
14-18	34,053	+ 5	63,249	- 18	9,228	+ 12	12,983	- 22
20 and up	3,794	- 3	11,481	- 37	1,660	+ 13	2,677	- 47
Total	2,330,856	+ 59	4,264,364	+ 27	439,941	+ 39	781,307	+ 15
NORTH					SOUTH			
2-4	343,813	+ 91	916,541	+ 57	492,804	+ 69	581,152	+131
6-8	73,696	+ 44	119,902	+ 36	98,898	+ 25	81,601	+ 48
10-12	14,820	+ 22	40,619	+ 10	38,738	+ 9	33,901	+ 51
14-18	3,297	+ 33	14,166	- 2	11,605	- 9	11,841	+ 6
20 and up	247	- 31	1,824	- 22	776	- 3	1,376	- 35
Total	435,873	+ 77	1,093,052	+ 51	642,821	+ 53	709,871	+107
CENTRAL					DELTA			
2-4	622,647	+ 90	1,016,211	+ 22	25,311	+212	402,036	- 16
6-8	115,804	+ 18	118,993	- 18	4,766	- 6	55,051	- 6
10-12	30,818	+ 10	39,333	- 7	1,841	+ 25	18,647	- 26
14-18	9,274	+ 21	11,689	- 32	649	+ 51	12,570	- 28
20 and up	871	+ 26	1,548	- 44	240	- 59	4,056	- 31
Total	779,414	+ 68	1,187,774	+ 14	32,807	+ 98	492,360	- 16



## STANDARD TABLES

Tables identical in format to those that follow will be found in all State reports issued by the Forest Survey. Their purpose is to facilitate compilation of data for various States and regions.

Table I. *Land area, by major classes of land, Mississippi, 1957*

Class of land	Area
	<i>Thousand acres</i>
Forest:	
Commercial	17,193.6
Noncommercial:	
Productive-reserved	31.5
Unproductive	...
Total forest	17,225.1
Nonforest	12,927.2
All land	30,152.3

1 Includes some acreage of water according to Survey standards of area classification but defined by the Bureau of Census as land.

Table II. *Commercial forest land area, by ownership class, Mississippi, 1957*

Ownership class	Area
	<i>Thousand acres</i>
Federally owned or managed:	
National forest	1,114.9
Indian	12.3
Bureau of Land Management	8.3
Other	129.7
Total	1,265.2
State	54.5
County and municipal	397.2
Private:	
Farm	7,410.5
Industrial and other	8,066.2
Total	15,476.7
All ownerships	17,193.6

Table III. *Area of commercial forest land, by major forest types, Mississippi, 1957*

Forest type	Area
	<i>Thousand acres</i>
Longleaf-slash pine	2,043.9
Loblolly-shortleaf pine	4,596.1
Oak-pine	2,727.4
Oak-hickory	4,070.1
Oak-gum-cypress	3,273.8
Elm-ash-cottonwood	482.3
Total	17,193.6

Table IV. *Net volume of live sawtimber and growing stock on commercial forest land, by stand-size class, Mississippi, 1957*

Stand-size class	Sawtimber	Growing stock
	<i>Million board feet</i>	<i>Million cubic feet</i>
Sawtimber stands	17,937.8	4,262.9
Poletimber stands	5,868.7	2,660.1
Seedling and sapling stands	1,616.4	631.9
Nonstocked and other areas not elsewhere classified	123.8	34.1
Total	25,546.7	7,589.0



Table V. *Net volume of live sawtimber and growing stock on commercial forest land, by ownership class, Mississippi, 1957*

Ownership class	Sawtimber	Growing stock
	Million board feet	Million cubic feet
Federally owned or managed:		
National forest	3,299.5	819.7
Indian	34.1	9.6
Bureau of Land Management	14.0	3.7
Other	252.5	68.8
<b>Total</b>	<b>3,600.1</b>	<b>901.8</b>
State	83.9	21.5
County and municipal	519.9	178.5
Private:		
Farm	8,167.9	2,753.7
Industrial and other	13,174.9	3,733.5
<b>Total</b>	<b>21,342.8</b>	<b>6,487.2</b>
<b>All ownerships</b>	<b>25,546.7</b>	<b>7,589.0</b>

Table VI. *Net volume of live sawtimber and growing stock on commercial forest land, by species, Mississippi, 1957*

Species	Sawtimber	Growing stock
	Million board feet	Million cubic feet
Softwoods:		
Longleaf and slash pines	2,573.7	652.6
Shortleaf and loblolly pines	9,959.6	2,449.4
Other southern yellow pines	439.0	96.6
Cypress	530.1	99.9
Other eastern softwoods	35.0	14.8
<b>Total</b>	<b>13,537.4</b>	<b>3,313.3</b>
Hardwoods:		
White oaks ( <i>Quercus alba</i> and <i>michauxii</i> )	975.5	327.8
Red oaks ( <i>Q. rubra</i> , <i>falcata</i> var. <i>pagodaefolia</i> , and <i>shumardii</i> )	376.9	117.4
Other white oaks	754.5	336.9
Other red oaks	2,167.7	813.6
Sugar maple	2.4	3.4
Soft maples	89.5	56.5
Beech	241.5	67.2
Sweetgum	1,934.8	751.9
Tupelo and blackgum	1,318.2	464.2
Ash	271.8	101.1
Hickory	1,135.7	385.2
Cottonwood	453.5	86.8
Basswood	37.6	9.7
Yellow-poplar	498.9	134.9
Black walnut	7.2	4.9
Other eastern hardwoods	1,743.6	614.2
<b>Total</b>	<b>12,009.3</b>	<b>4,275.7</b>
<b>All species</b>	<b>25,546.7</b>	<b>7,589.0</b>



Table VII. *Net volume of live sawtimber on commercial forest land, by diameter class groups and species, Mississippi, 1957*

Species	Diameter class groups						Total
	10 inches	12 inches	14 inches	16 inches	18 inches	20 inches and up	
— — — — Million board feet — — — —							
Southern yellow pines	2,719.0	2,956.0	2,578.6	1,952.4	1,208.7	1,557.6	12,972.3
Other eastern softwoods	31.5	49.5	67.8	76.2	126.5	213.6	565.1
White oaks ( <i>Quercus alba</i> and <i>michauxii</i> )	...	207.2	259.4	206.1	102.2	200.6	975.5
Other white oaks	...	179.3	154.8	105.5	94.7	220.2	754.5
Red oaks ( <i>Q. rubra</i> , <i>falcata</i> var. <i>pagodaefolia</i> , and <i>shumardii</i> )	...	81.7	63.6	64.7	50.2	116.7	376.9
Other red oaks	...	435.7	436.7	416.4	312.6	566.3	2,167.7
Sugar maple	...	...	2.4	...	...	...	2.4
Beech	...	21.7	41.2	62.7	34.5	81.4	241.5
Sweetgum	...	429.1	502.0	362.4	292.0	349.3	1,934.8
Tupelo and blackgum	...	396.2	317.9	245.6	150.2	208.3	1,318.2
Yellow-poplar	...	76.8	122.6	116.7	63.3	119.5	498.9
Other eastern hardwoods	...	678.5	789.8	593.0	420.3	1,257.3	3,738.9

Table VIII. *Net volume of all timber on commercial forest land, by class of material and species group, Mississippi, 1957*

Class of material	Total	Softwoods	Hardwoods
— — — — — Million cubic feet — — — — —			
Growing stock:			
Sawtimber trees:			
Sawlog portion	4,162.8	2,230.1	1,932.7
Upper stem portion	879.8	220.5	659.3
Total	5,042.6	2,450.6	2,592.0
Poletimber trees	2,546.4	862.7	1,683.7
Total growing stock	7,589.0	3,313.3	4,275.7
Other material:			
Sound cull trees	1,468.9	27.3	1,441.6
Rotten cull trees	433.1	10.2	422.9
Hardwood limbs	498.7	...	498.7
Salvable dead trees	8.6	2.0	6.6
Total other material	2,409.3	39.5	2,369.8
Total, all timber	9,998.3	3,352.8	6,645.5

Table IX. *Net annual growth, annual mortality, and annual cut of live sawtimber and growing stock on commercial forest land, by species group, Mississippi, 1956*

Item	Sawtimber			Growing stock		
	All species	Softwoods	Hardwoods	All species	Softwoods	Hardwoods
— — — — — Million board feet — — — — —						
Net annual growth	2,135.5	1,371.5	764.0	602.4	333.4	269.0
Annual mortality	188.1	82.1	106.0	63.4	22.4	41.0
Annual cut						
Timber products	1,652.5	706.5	946.0	397.9	188.1	209.8
Logging residues	89.5	12.5	77.0	79.5	10.3	69.2
Total annual cut	1,742.0	719.0	1,023.0	477.4	198.4	279.0



Table X. Output of timber products and annual cut of live sawtimber and growing stock, Mississippi, 1956

Product	Output of timber products					Annual cut of sawtimber			Annual cut of growing stock		
	Volume in standard units		Roundwood volume								
	Standard units	Number	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods
			Thousand cubic feet			Thousand board feet			Thousand cubic feet		
Sawlogs	MBM <sup>1</sup>	1,145,827	179,606	97,292	82,314	1,089,334	544,836	544,498	220,575	103,778	116,797
Veneer logs & bolts	MBM <sup>1</sup>	89,914	12,588	...	12,588	99,355	...	99,355	18,163	...	18,163
Cooperage logs & bolts	MBM <sup>1</sup>	18,627	2,651	...	2,651	20,710	...	20,710	4,307	...	4,307
Pulpwood	Std. cords <sup>2</sup>	2,069,033	157,811	89,343	68,468	257,314	107,211	150,103	145,020	77,430	67,590
Fuelwood	Std. cords <sup>2</sup>	1,024,970	76,873	5,952	70,921	132,922	9,047	123,875	49,198	3,809	45,389
Piling	M linear feet	4,181	2,619	2,619	...	15,131	15,131	...	3,081	3,081	...
Poles	M pieces	599	7,216	7,216	...	41,713	41,713	...	8,488	8,488	...
Posts	M pieces	16,443	7,650	1,416	6,234	16,159	199	15,960	6,003	1,279	4,724
Hewn ties	M pieces	280	1,966	28	1,938	14,966	208	14,758	3,467	38	3,429
Miscellaneous <sup>3</sup>	M cu. ft.	5,811	5,811	553	5,258	35,955	613	35,342	10,765	510	10,255
Total			454,791	204,419	250,372	1,723,559	718,958	1,004,601	469,067	198,413	270,654

<sup>1</sup> International 1/4-inch rule.<sup>2</sup> Rough wood basis.<sup>3</sup> Not including 6.4 million cubic feet of wood from mill residues used for pulp.<sup>4</sup> Not including 77.6 million cubic feet of wood from mill residues used for domestic and industrial fuel.<sup>5</sup> Includes handle stock, other miscellaneous dimension products, etc.<sup>6</sup> Not including 3.3 million cubic feet of mill residues used for miscellaneous products.<sup>7</sup> Not including 18.4 million board feet of wood killed by cultural operations.<sup>8</sup> Not including 8.3 million cubic feet of wood killed by cultural operations.



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**Forest Service, U.S. Department of Agriculture**

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